

VPDES PERMIT PROGRAM FACT SHEET

This document gives pertinent information concerning the reissuance of the VPDES Permit listed below. This permit is being processed as a MAJOR, INDUSTRIAL permit. The effluent limitations contained in this permit will maintain the Water Quality Standards in 9 VAC 25-260. This permit action consists of permit reissuance for a term of five years with updated boilerplate special conditions, limited parameters and groundwater monitoring.

1. **PERMIT NO.:** VA0006408

EXISTING PERMIT

EXPIRATION DATE: June 27, 2012

2. **FACILITY NAME AND LOCAL MAILING ADDRESS**

Greif Packaging LLC
P. O. Box 339
Amherst, VA 24521

FACILITY PHYSICAL LOCATION (IF DIFFERENT)

861 Fibre Plant Road; Riverville, VA
Amherst County

FACILITY CONTACT:

NAME: John J. Petchul
TITLE: Senior Environmental Engineer
PHONE: (434) 933-4117
E-MAIL: John.Petchul@Greif.com

ALTERNATE CONTACT:

NAME:
TITLE:
PHONE: ()
E-MAIL:

3. **OWNER CONTACT: (TO RECEIVE PERMIT)**

NAME: David T. Scott
TITLE: Mill Manager
COMPANY NAME: (IF DIFFERENT)
ADDRESS: P. O. Box 339
Amherst, VA 24521
PHONE: (434) 933-4412
E-MAIL:

4. **PERMIT DRAFTED BY:** DEQ, Water Permits, Blue Ridge Regional Office

Permit Writer(s): Frank Bowman
Reviewed By: Bob Tate

Date(s): 5/3/12
Date(s): 5/15/12

5. **PERMIT CHARACTERIZATION:** (Check as many as appropriate)

- | | | |
|--|--|--|
| <input type="checkbox"/> Issuance | <input type="checkbox"/> Municipal | <input type="checkbox"/> POTW |
| <input checked="" type="checkbox"/> Reissuance | SIC Code(s) _____ | <input type="checkbox"/> PVOTW |
| <input type="checkbox"/> Revoke & Reissue | _____ | <input checked="" type="checkbox"/> Private |
| <input type="checkbox"/> Owner Modification | <input checked="" type="checkbox"/> Industrial | <input type="checkbox"/> Federal |
| <input type="checkbox"/> Board Modification | SIC Code(s) 2631 | <input type="checkbox"/> State |
| <input type="checkbox"/> Change of Ownership/Name | 4953 | <input type="checkbox"/> Publicly-Owned Industrial |
| Effective Date: _____ | | |
| <input type="checkbox"/> Site-Specific WQ Criteria | <input type="checkbox"/> Interim Limits in Other Document (attach to fact sheet) | |
| <input type="checkbox"/> Variance to WQ Standards | <input type="checkbox"/> Concept Engineering Report Being Approved with Permit | |
| <input type="checkbox"/> Water Effects Ratio | <input type="checkbox"/> Possible Interstate Effect | |

6. **APPLICATION COMPLETE DATE:** December 8, 2011

7. **RECEIVING WATERS CLASSIFICATION:** River basin information.

Outfall No(s): 001, 006

Receiving Stream:	James River	7-Day/10-Year Low Flow:	356 MGD
River Mile:	235.4 and 234.8, respectively	7-Day/10-Year High Flow:	708 MGD
Basin:	James River	1-Day/10-Year Low Flow:	295 MGD
Subbasin:	James River (Middle)	1-Day/10-Year High Flow:	582 MGD
Section:	11d	30-Day/5-Year Low Flow:	463 MGD
Class:	III	30-Day/10-Year Low Flow:	418 MGD
Special Standard(s):	None	30-Day/10-Year High Flow:	854 MGD
Tidal?	No	Harmonic Mean Flow:	1192 MGD
On 303(d) list?	Yes		

Outfall No(s): 002, 007, 008, 009, 010, 011 and 012

Receiving Stream:	Unnamed tributary to James River	7-Day/10-Year Low Flow:	0 MGD
River Mile:	0.68, 0.48, 0.60, 0.68, 0.76, 0.32 and 0.34, respectively	7-Day/10-Year High Flow:	0 MGD
Basin:	James River	1-Day/10-Year Low Flow:	0 MGD
Subbasin:	James River (Middle)	1-Day/10-Year High Flow:	0 MGD
Section:	11d	30-Day/5-Year Low Flow:	0 MGD
Class:	III	30-Day/10-Year Low Flow:	0 MGD
Special Standard(s):	None	30-Day/10-Year High Flow:	0 MGD
Tidal?	No	Harmonic Mean Flow:	0 MGD
		On 303(d) list?	Yes

Outfall No(s): 003 (including 301), 004 and 005

Receiving Stream:	James River	7-Day/10-Year Low Flow:	356 MGD
River Mile:	235.39, 235.2 and 235.8, respectively	7-Day/10-Year High Flow:	708 MGD
Basin:	James River	1-Day/10-Year Low Flow:	295 MGD
Subbasin:	James River (Middle)	1-Day/10-Year High Flow:	582 MGD
Section:	11d	30-Day/5-Year Low Flow:	463 MGD
Class:	III	30-Day/10-Year Low Flow:	418 MGD
Special Standard(s):	None	30-Day/10-Year High Flow:	854 MGD
		Harmonic Mean Flow:	1192 MGD
Tidal?	No	On 303(d) list?	Yes

SEE ATTACHMENT 10

8. **FACILITY DESCRIPTION:** Describe the type facility from which the discharges originate.

Existing industrial discharge resulting from the manufacturing of unbleached semi-chemical corrugated medium and recycled liner board.

9. **LICENSED WASTEWATER OPERATOR REQUIREMENTS:** () No (x) Yes Class: I

10. **RELIABILITY CLASS:** _____ Industrial Facility – NA

11. **SITE INSPECTION DATE:** 6/22/11 **REPORT DATE:** 6/30/11

Performed By: Troy Nipper

SEE ATTACHMENT 1

12. **DISCHARGE(S) LOCATION DESCRIPTION:** Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.

Name of Topo: Buffalo Ridge

Quadrant No.: 132C

SEE ATTACHMENT 2

13. **ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, ALSO PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.**

Narrative: Greif Packaging LLC manufactures unbleached corrugated medium and recycled liner board at its operations located near Riverville in Amherst County, Virginia.

Hardwood logs of varying lengths are trucked to the facility and mechanically debarked on-site. The debarked wood is chipped for making pulp and the bark is used as a fuel source in the combination fuel boiler. The wood chips are heated with cooking liquor containing sodium carbonate and sodium hydroxide to produce pulp. The pulp is cleaned and prepared in a three-stage countercurrent washer, and used to manufacture corrugating medium on paper machine no. 1. Liquor from the semi-chemical process is concentrated to form heavy black liquor and incinerated to recover molten sodium carbonate. Paper machine no. 1 uses 70% virgin hardwood fiber and 30% recycled fiber for the corrugated medium and has an average daily production of 820 tons per day.

Old corrugated containers (OCC) are hauled to the facility where they are mechanically pulped in the OCC pulping tub. The pulp is gravity thickened in the OCC tower and the recycled fiber is subsequently used in paper machine #2 to produce the recycled liner board. Paper machine #2 uses 100% recycled fiber for the liner board and has an average daily production of 470 tons per day.

Water used in the process is taken from the James River, stored in a pond and treated with sodium hypochlorite and bromine for algae and Asian mussel control. The treated water is used in the semi-chemical pulping process, in the OCC pulping process, as cooling water and make-up water in the power house and combination fuel boiler, and as vacuum seal water for the liquor evaporator and paper machine #1 vacuum pumps. Process wastewater from these activities is reused in the both the OCC and semi-chemical pulping processes and also at each paper machine. Water used as boiler make-up water is demineralized and treated with corrosion inhibitors before use. The demineralizers are regenerated with sodium hydroxide and sulfuric acid.

Process wastewater originates from the OCC plant, the no. 1 and no. 2 paper machines, the power house, and pulp mill chemical recovery. The process water flows to the wastewater treatment plant, which also takes in landfill leachate, some storm water and both filtrate and pressate from the sludge dewatering processes. The wastewater treatment process includes screening, primary clarification, an aerated waste stabilization basin (activated sludge) and secondary clarification. Nutrients in the form of urea (nitrogen source) and phosphoric acid (phosphorus source) are fed after the primary clarifiers and before the aeration basin. Polymer may be added after aeration and before secondary clarification. Activated sludge is recycled from the secondary clarifiers to the head of the aeration basin. The treated wastewater may go to a holding pond for subsequent discharge to the James River or be discharged directly to the James River. A defoamer is added prior to final discharge of the effluent. The effluent is discharged through a six-port diffuser (outfall 001) in the James River.

Plant potable water comes from ground water. All sanitary waste streams are disposed of via on-site septic tank/drainfield systems.

All other outfalls are comprised of storm water. The drainage areas for outfalls 002, 003 (including 301), 004 and 005 contain industrialized areas whereas the drainage areas for outfalls 006 through 012 do not contain any industrialized areas.

SEE ATTACHMENT 3

14. **DISCHARGE DESCRIPTION:** Describe each discharge originating from this facility.

SEE ATTACHMENT 4

15. **COMBINED TOTAL FLOW:**

TOTAL: 6.57 MGD (for public notice)

PROCESS FLOW: 6.57 MGD (IND.)

NONPROCESS FLOW: Outfalls 002-012 (including 301) are rainfall dependent.

DESIGN FLOW: MGD (MUN.)

16. **STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS:** (Check all which are appropriate)

- ☒ State Water Control Law
- ☒ Clean Water Act
- ☒ VPDES Permit Regulation (9 VAC 25-31-10 et seq.)
- ☒ EPA NPDES Regulation (Federal Register)
- ☒ EPA Effluent Guidelines [40 CFR 400 – 471 (industrial)]
- ☐ EPA Effluent Guidelines [40 CFR 133 (municipal 2^o treatment)]
- ☒ Water Quality Standards (9 VAC 25-260-00 et seq.)
- ☒ Waste load Allocation from a TMDL or River Basin Plan

17. **LIMITATIONS/MONITORING:** Include all effluent limitations and monitoring requirements being placed in the permit for each outfall, including any WET limits. If applicable, include any limitations and monitoring requirements being included for sludge and ground water.

The permit contains a condition which requires ground water monitoring in accordance with a February 11, 2004 approved ground water monitoring plan.

There are no applicable limitations and monitoring requirements for sludge.

SEE ATTACHMENT 5

18. **SPECIAL CONDITIONS:** Provide all actual permit special conditions, including compliance schedules, toxic monitoring, sludge, ground water, storm water and pretreatment.

SEE ATTACHMENT 6

19. **EFFLUENT/SLUDGE/GROUND WATER LIMITATIONS/MONITORING RATIONALE:** For outfalls, attach any analyses completed (MIX.EXE and WLA.EXE) and STATS printouts for individual toxic parameters. As a minimum, it will include: waste load allocation (acute, chronic and human health); statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); input data listing; and, effluent limitations determination. Include all calculations used for each outfall's set of effluent limits and incorporate the results of any water quality model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limited internal waste streams and indicator pollutants. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:

WAIVERS/VARIANCES/ALTERNATE LIMITATIONS: Provide justification or refutation rationale for requested waivers to the permit application (e.g., testing requirements) or variances/alternatives to required permit conditions/limitations. This includes, but is not limited to: variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

N/A

SUITABLE DATA: What, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

All suitable effluent data were reviewed.

ANTIDEGRADATION REVIEW: Provide all appropriate information/calculations for the antidegradation review.

Tier I: _____ **Tier II:** X **Tier III:** _____

The State Water Control Board's Water Quality Standards regulations include an antidegradation policy (9 VAC 25-260-30). All state surface waters are provided one of three levels of antidegradation protection. For Tier I, existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier II water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier II waters is not allowed without an evaluation of the economic and social impacts. Tier III water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The antidegradation review begins with the Tier determination. The facility has some outfalls which discharge directly to James River and some which discharge directly to an unnamed tributary that goes to the James River.

The James River is listed as Category 5A on the 303(d) list for non-attainment based on PCB contamination in fish tissue. Non-attainment based on fish consumption advisories, bans, and prohibitions (e.g., PCB fish consumption advisory based on PCBs in fish tissue) is also no longer used as a sole basis for classifying a receiving stream as Tier I. The James River Water Quality Management Plan contains a waste load allocation for BOD5 for this segment of the river which precludes the facility from having effluent limitations based on federal effluent guidelines. Therefore, James River, at the point of the applicable facility discharges, is designated as Tier II and no further review is needed.

The unnamed tributary is not listed on the 303(d) list and no in-stream data are available that indicate the water quality criteria either have been violated or are barely met. Therefore, the unnamed tributary, at the point of this facility's discharge, is designated as Tier II and no significant degradation of the existing water quality will be allowed.

Permit limits have been established by determining waste load allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These waste load allocations will provide for the protection and maintenance of all existing uses.

Antidegradation baselines would be evaluated for all parameters for which data exist, but because there is no proposed expansion for this existing discharge (no increase in pollutant loading), the baselines are not established. If this permit action had included an expansion of the design capacity for this facility, then baselines would have been calculated as not more than 25% of the unused assimilative capacity for the protection of aquatic life (acute and chronic) and not more than 10% for the protection of human health. The unused assimilative capacity is defined as the difference between existing water quality and the criterion for a specific pollutant.

ANTIBACKSLIDING REVIEW: Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information.

There are no backsliding issues to address in this permit (i.e., limits as stringent or more stringent when compared to the previous permit).

SEE ATTACHMENT 7

20. **SPECIAL CONDITIONS RATIONALE:** Provide a rationale for each of the permit's special conditions, including compliance schedules, toxic monitoring, sludge, ground water, storm water and pretreatment.

SEE ATTACHMENT 8

21. **SLUDGE DISPOSAL PLAN:** Provide a brief description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.

Waste sludge from the primary and secondary clarifiers is blended and dewatered with a screw press and belt filter press. Dewatered sludge is composted and sold as a soil amendment. Sanitary waste generated by the facility is conveyed to an on-site septic system for treatment and disposal. Land application of sludge is no longer occurring.

22. **MATERIAL STORED:** List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.

SEE ATTACHMENT 9

23. **RECEIVING WATERS INFORMATION:** Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260 - Part IX) [along with Parts VII and VIII]]. Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied. Attach any memoranda or other information which helped to develop permit conditions (i.e. **flow determination memo, tier determinations**, PReP complaints, special water quality studies, **STORET data** and other biological and/or chemical data, etc.

SEE ATTACHMENT 10

24. **303(d) LISTED SEGMENTS:** Indicate if the facility **discharges directly** to a segment that is listed on the current 303(d) list, if the allocations are specified by an approved TMDL and, if so, provide all appropriate information/calculations. If the facility discharges directly to a stream segment that is on the current 303(d) list, the fact sheet must include a description of how the TMDL requirements are being met.

This facility has some outfalls which discharge directly to James River and some which discharge directly to an unnamed tributary that goes to the James River.

The unnamed tributary is not listed on the current approved 303(d) list so TMDLs are not included in this permit for the outfalls discharging to the unnamed tributary.

This segment of the James River receiving the effluent directly or indirectly from outfalls 001-005 is listed as Category 5A on the current approved 303(d) list for non-attainment based on E. coli and PCB contamination in fish tissue. A TMDL has not been prepared or approved for this stream segment. The permit contains a TMDL reopener clause which will allow it to be modified, in compliance with section 303(d)(4) of the Act once a TMDL is approved.

SEE ATTACHMENT 11

25. **CHANGES TO PERMIT:** Use **TABLE A** to record any **changes from the previous permit** and the rationale for those changes. Use **TABLE B** to record any **changes made to the permit during the permit processing period** and the rationale for those changes [i.e., use for comments from the applicant, VDH, EPA, other agencies and/or the public where comments resulted in changes to the permit limitations or any other changes associated with the special conditions or reporting requirements].

SEE ATTACHMENT 12

26. **NPDES INDUSTRIAL PERMIT RATING WORKSHEET:**

TOTAL SCORE: 105

SEE ATTACHMENT 13

27. **EPA/VIRGINIA DRAFT PERMIT SUBMISSION CHECKLIST:**

SEE ATTACHMENT 14

- The discharge is in conformance with the existing planning documents for the area.

- VDH COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from the Virginia Dept. of Health and noted how resolved.

Based on their review of the application, the VDH had no objections to the draft permit, as stated by memo dated March 19, 2012.

EPA COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA had no comments as stated by e-mail dated June 12, 2012.

ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from an adjacent state and noted how resolved.

Not Applicable.

OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved.

Not Applicable.

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT:
Document any comments received from other sources and note how resolved.

None.

PUBLIC NOTICE INFORMATION: Comment Period: **Start Date:** May 23, 2012
End Date: June 22, 2012

Persons may comment in writing or by e-mail to the DEQ on the proposed reissuance of the permit within 30 days from the date of the first notice. Address all comments to the contact person listed below. Written or e-mail comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The Director of the DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requestor's interests would be directly and adversely affected by the proposed permit action.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Frank Bowman at: Department of Environmental Quality (DEQ), Blue Ridge Regional Office, 7705 Timberlake Road, Lynchburg, VA 24502. Telephone: 434-582-6207
E-mail: frank.bowman@deq.virginia.gov

Following the comment period, the Board will make a determination regarding the proposed reissuance. This determination will become effective, unless the Director grants a public hearing. Due notice of any public hearing will be given.

- The permittee is current with their annual permit maintenance fees.

31. **SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS:**

Attachment <u>1</u>	Site Inspection Report/Memorandum
Attachment <u>2</u>	Discharge Location/Topographic Map
Attachment <u>3</u>	Schematic/Plans & Specs/Site Map/Water Balance
Attachment <u>4</u>	Discharge/Outfall Description
Attachment <u>5</u>	Limitations/Monitoring
Attachment <u>6</u>	Special Conditions
Attachment <u>7</u>	Effluent/Sludge/Ground Water Limitations/Monitoring Rationale/Suitable Data/ Stream Modeling/Antidegradation/Antibacksliding
Attachment <u>8</u>	Special Conditions Rationale
Attachment <u>9</u>	Material Stored
Attachment <u>10</u>	Receiving Waters Info./Tier Determination/STORET Data
Attachment <u>11</u>	303(d) Listed Segments
Attachment <u>12</u>	TABLE A and TABLE B - Change Sheets
Attachment <u>13</u>	NPDES Industrial Permit Rating Worksheet
Attachment <u>14</u>	EPA/Virginia Draft Permit Submission Checklist
Attachment <u>15</u>	Chronology Sheet
Attachment <u> </u>	

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM

ATTACHMENT 2

DISCHARGE LOCATION/TOPOGRAPHIC MAP

ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/
WATER BALANCE

ATTACHMENT 4

DISCHARGE/OUTFALL DESCRIPTION

TABLE I
NUMBER AND DESCRIPTION OF OUTFALLS

OUTFALL NO.	DISCHARGE LOCATION	DISCHARGE SOURCE (1)	TREATMENT (2)	FLOW (3)
001	37° 30' 47" 78° 54' 5"	paper process wastewater, landfill leachate, miscellaneous yard and floor drains, vacuum pump seal water, non-contact cooling water, boiler blowdown, and storm water runoff associated with industrial activity	Screening, primary clarification, activated sludge, secondary clarification, foam suppression, and discharge to the James River.	6.57 MGD
002	37° 30' 15" 78° 55' 30"	storm water runoff associated with industrial activity	Settling	Storm water dependent
003	37° 30' 15" 78° 54' 45"	storm water runoff associated with industrial activity	None	Storm water dependent
004	37° 30' 43" 78° 54' 10"	storm water runoff associated with industrial activity	None	Storm water dependent
005	37° 30' 52" 78° 54' 00"	storm water runoff associated with industrial activity	Settling in some portion of the drainage basin	Storm water dependent
006	37° 31' 00" 78° 53' 45"	storm water runoff (no industrial activity)	None	Storm water dependent
007	37° 31' 15" 78° 54' 15"	storm water runoff (no industrial activity)	None	Storm water dependent
008	37° 31' 30" 78° 54' 30"	storm water runoff (no industrial activity)	None	Storm water dependent
009	37° 31' 30" 78° 54' 30"	storm water runoff (no industrial activity)	None	Storm water dependent
010	37° 31' 30" 78° 54' 30"	storm water runoff (no industrial activity)	None	Storm water dependent
011	37° 31' 30" 78° 54' 00"	storm water runoff (no industrial activity)	None	Storm water dependent
012	37° 31' 27" 78° 54' 09"	storm water runoff (no industrial activity)	None	Storm water dependent

- (1) List operations contributing to flow
- (2) Give brief description, unit by unit
- (3) Give maximum 30-day average flow for industry and design flow for municipal

ATTACHMENT 5

LIMITATIONS/MONITORING

INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 001

Outfall Description: final effluent from secondary clarifiers or the final holding pond

SIC CODE: 2631 NAICS CODE: 322130

(x) Final Limits () Interim Limits Effective Dates - From: Permit Effective date To: Permit expiration date

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD)	NL	NA	NA	NL	Continuous	Recorded
pH (standard units)	NA	NA	6.0	9.0	5 Days/Week	Grab
BOD5 (kg/day) [a]	1555	NA	NA	3110	1 Day/Week	24-HC
Total Suspended Solids (kg/day) [a]	5072	NA	NA	10,059	1 Day/Week	24-HC
Stream Flow, Mean Daily (cfs) [a] [b]	NL	NA	NA	NL	2 Days/Week[c]	Measured
Color (528 - 600 cfs) (PCU) [a] [c]	1922	NA	NA	2059	2 Days/Week[c]	24-HC
Color (601 - 700 cfs) (PCU) [a] [c]	2184	NA	NA	2339	2 Days/Week[c]	24-HC
Color (701 - 800 cfs) (PCU) [a] [c]	2543	NA	NA	2723	2 Days/Week[c]	24-HC
Color (801 - 900 cfs) (PCU) [a] [c]	2901	NA	NA	3106	2 Days/Week[c]	24-HC
Color (901 - 1000 cfs) (PCU) [a] [c]	3259	NA	NA	3480	2 Days/Week[c]	24-HC
Color (1001 - 1100 cfs) (PCU) [a] [c]	3618	NA	NA	3873	2 Days/Week[c]	24-HC
Color (1101 cfs and up) (PCU) [a] [c]	3976	NA	NA	4257	2 Days/Week[c]	24-HC

* = UNLESS OTHERWISE NOTED NA = NOT APPLICABLE NL = NO LIMIT, MONITORING REQUIREMENT ONLY

[a] See Part I.B.5 for additional instructions regarding effluent monitoring frequencies.

[b] Stream flows shall be obtained on the same day the color sampling is completed.

[c] See Part I.B.9. for instructions on color monitoring, limitations and reporting.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

NOTE: The Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall are included in the current Registration List for the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Watershed in Virginia, under registration number VAN040073.

BASES FOR LIMITATIONS/MONITORING:

PARAMETER	MULTIPLIER OR PRODUCTION	TECHNOLOGY	WATER QUALITY	BEST PROFESSIONAL JUDGMENT
Flow (MGD)				X
pH (SU)		X	X	
BOD5 (kg/day)	James River Water Quality Management Plan		X	
TSS (kg/day)	<p>Subpart F (semi-chemical) 5.5 lbs/1000 lbs product (monthly avg.) 11 lbs/1000 lbs product (daily max.) product = 820 tons</p> <p>Subpart J (2⁰ fiber, non-deink) 2.3 lbs/1000 lbs product (monthly avg.) 4.4 lbs/1000 lbs product (daily max.) product = 470 tons</p>	X		
Color (PCU)				X
Stream flow (cfs)				X

STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL #002

Outfall Description: Storm water from regulated SIC code industrial activity areas (paper manufacturing and landfill operations)

SIC CODE: 2631 NAICS CODE: 322130

(x) Final Limits () Interim Limits Effective Dates - From: Permit Effective date To: Permit expiration date

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS [a]	
	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
	µg/l*	µg/l*		
Flow (MGD)	NA	NL	1/6 Months	Estimated [b]
pH (standard units)	NA	NL	1/6 Months	Grab
Total Suspended Solids (mg/l)	NA	NL	1/6 Months	Grab
BOD5 (mg/l)	NA	NL	1/6 Months	Grab
Total Recoverable Iron (mg/l)	NA	NL	1/6 Months	Grab

* = UNLESS OTHERWISE NOTED NA = NOT APPLICABLE NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30, **due July 10**); 2nd half (July 1 - December 31, **due January 10**).

[a] Storm event sampling for this outfall shall not be subject to the specified storm event monitoring requirements (0.1 inch; 72 hours separation; storm event duration; rainfall measurements). All other requirements specified under Part I.D.2.a. and b. (General Storm Water Conditions) shall apply.

[b] Estimate of the total volume of the discharge sampled during the storm event.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

BASES FOR LIMITATIONS/MONITORING:

PARAMETER	INDUSTRIAL STORM WATER CATEGORY	TECHNOLOGY	WATER QUALITY	BEST PROFESSIONAL JUDGMENT
Flow, pH			X	X
TSS, total recoverable iron	Landfills, Land Application Sites & Open Dumps (11)			X (based on the permits for storm water from industrial sites - EPA's multi-sector permit and DEQ's general permit)
BOD5	Paper & Allied Products (2)			X (based on the permits for storm water from industrial sites - EPA's multi-sector permit and DEQ's general permit)

STORM WATER CATEGORIES:

- | | | |
|---|---|--|
| (1) Timber Products | (14) Steam Electric Power Generating, Inc. Coal Handling Areas | (21) Textile Mills, Apparel & Other Fabric Products Mfg. |
| (2) Paper & Allied Products | (15) Motor Freight, Passenger, Rail, U.S. Postal Transportation & Petroleum Bulk Oil Stations and Terminals | (22) Wood & Metal Furniture and Fixture Mfg. |
| (3) Chemical & Allied Products | (16) Water Transportation With Maintenance and/or Equipment Cleaning | (23) Printing & Publishing |
| (4) Asphalt Paving/Roofing Materials & Lubricant | (17) Ship/Boat Building or Repairing | (24) Rubber, Miscellaneous Plastic Products & Miscellaneous Mfg. |
| (5) Glass, Clay, Cement, Concrete & Gypsum Products | (18) Vehicle Maintenance, Equipment Cleaning or Deicing Areas At Air Transportation Facilities | (25) Leather Tanning & Finishing |
| (6) Primary Metals | (19) Treatment Works | (26) Fabricated Metal Products |
| (7) Metal Mining (Ore Mining & Dressing) | (20) Food & Kindred Products | (27) Transportation Equipment, Industrial Or Commercial Machinery Mfg. |
| (8) Coal Mines & Coal Mining Related | | (28) Electronic & Electrical Equipment and Components, Photographic & Optical Goods Mfg. |
| (9) Oil & Gas Extraction & Petroleum Refineries | | (29) Nonclassified Facilities |
| (10) Hazardous Waste Treatment, Storage, Disposal | | |
| (11) Landfills, Land Application Sites & Open Dumps | | |
| (12) Automobile Salvage Yards | | |
| (13) Scrap/Waste Recycling | | |

STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 003 and 004

Outfall Description: Storm water from regulated SIC code industrial activity areas (paper manufacturing)

SIC CODE: 2631 NAICS CODE: 322130

(x) Final Limits () Interim Limits Effective Dates - From: Permit Effective date To: Permit expiration date

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS [a]	
	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
	µg/l*	µg/l*		
Flow (MG)	NA	NL	1/6 Months	Estimated [b]
pH (standard units)	NL	NL	1/6 Months	Grab
BOD5 (mg/l)	NA	NL	1/6 Months	Grab

* = UNLESS OTHERWISE NOTED NA = NOT APPLICABLE NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30, **due July 10**); 2nd half (July 1 - December 31, **due January 10**).

[a] In addition to the analytical results, the permittee shall provide: (1) the date and duration (in hours) of the storm event(s) sampled; (2) rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; (3) the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and, (4) a monthly log documenting the amount of rainfall received at the facility on a daily basis. See Part I.D.2.a. and b. (General Storm Water Conditions).

[b] Estimate of the total volume of the discharge sampled during the storm event.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

BASES FOR LIMITATIONS/MONITORING:

PARAMETER	INDUSTRIAL STORM WATER CATEGORY	TECHNOLOGY	WATER QUALITY	BEST PROFESSIONAL JUDGMENT
Flow, pH			X	X
BOD5	Paper & Allied Products (2)			X (based on the permits for storm water from industrial sites - EPA's multi-sector permit and DEQ's general permit)

STORM WATER CATEGORIES:

- | | | |
|---|---|--|
| (1) Timber Products | (14) Steam Electric Power Generating, Inc. Coal Handling Areas | (21) Textile Mills, Apparel & Other Fabric Products Mfg. |
| (2) Paper & Allied Products | (15) Motor Freight, Passenger, Rail, U.S. Postal Transportation & Petroleum Bulk Oil Stations and Terminals | (22) Wood & Metal Furniture and Fixture Mfg. |
| (3) Chemical & Allied Products | (16) Water Transportation With Maintenance and/or Equipment Cleaning | (23) Printing & Publishing |
| (6) Asphalt Paving/Roofing Materials & Lubricant | (17) Ship/Boat Building or Repairing | (24) Rubber, Miscellaneous Plastic Products & Miscellaneous Mfg. |
| (7) Glass, Clay, Cement, Concrete & Gypsum Products | (18) Vehicle Maintenance, Equipment Cleaning or Deicing Areas At Air Transportation Facilities | (25) Leather Tanning & Finishing |
| (6) Primary Metals | (19) Treatment Works | (26) Fabricated Metal Products |
| (7) Metal Mining (Ore Mining & Dressing) | (20) Food & Kindred Products | (27) Transportation Equipment, Industrial Or Commercial Machinery Mfg. |
| (8) Coal Mines & Coal Mining Related | | (28) Electronic & Electrical Equipment and Components, Photographic & Optical Goods Mfg. |
| (9) Oil & Gas Extraction & Petroleum Refineries | | (29) Nonclassified Facilities |
| (10) Hazardous Waste Treatment, Storage, Disposal | | |
| (11) Landfills, Land Application Sites & Open Dumps | | |
| (12) Automobile Salvage Yards | | |
| (13) Scrap/Waste Recycling | | |

INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 301

Outfall Description: Storm water from the oil containment berm

SIC CODE: 2631

NAICS CODE: 322130

(x) Final Limits () Interim Limits Effective Dates - From: Permit Effective date To: Permit expiration date

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
	kg/day*	mg/l*	kg/day*		
Flow (MGD)	NL	NA	NL	1/6 Months	Estimated
Total Petroleum Hydrocarbons (mg/l)	30	NA	NA	1/6 Months	Grab

* = UNLESS OTHERWISE NOTED NA = NOT APPLICABLE NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30, **due July 10**); 2nd half (July 1 - December 31, **due January 10**).

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of tank bottom waters.

STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 005

Outfall Description: Storm water from regulated SIC code industrial activity areas 005 (paper manufacturing, wood handling and storage and closed landfill monitoring)

SIC CODE: 2631

NAICS CODE: 322130

(x) Final Limits () Interim Limits

Effective Dates - From: Permit Effective date

To: Permit expiration date

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS [a]	
	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
	µg/l*	µg/l*		
Flow (MG)	NA	NL	1/6 Months	Estimated [b]
pH (standard units)	NA	NL	1/6 Months	Grab
Total Suspended Solids (mg/l)	NA	NL	1/6 Months	Grab
BOD5 (mg/l)	NA	NL	1/6 Months	Grab
Total Recoverable Iron (mg/l)	NA	NL	1/6 Months	Grab

* = UNLESS OTHERWISE NOTED NA = NOT APPLICABLE NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30, **due July 10**); 2nd half (July 1 - December 31, **due January 10**).

[a] In addition to the analytical results, the permittee shall provide: (1) the date and duration (in hours) of the storm event(s) sampled; (2) rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; (3) the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and, (4) a monthly log documenting the amount of rainfall received at the facility on a daily basis. See Part I.D.2.a. and b. (General Storm Water Conditions).

[b] Estimate total volume of the discharge during the storm event.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

BASES FOR LIMITATIONS/MONITORING:

PARAMETER	INDUSTRIAL STORM WATER CATEGORY	TECHNOLOGY	WATER QUALITY	BEST PROFESSIONAL JUDGMENT
Flow, pH			X	X
TSS, total recoverable iron	Landfills, Land Application Sites & Open Dumps (11)			X (based on the permits for storm water from industrial sites - EPA's multi-sector permit and DEQ's general permit)
BOD5	Paper & Allied Products (2)			X (based on the permits for storm water from industrial sites - EPA's multi-sector permit and DEQ's general permit)

STORM WATER CATEGORIES:

- | | | |
|---|---|--|
| (1) Timber Products | (14) Steam Electric Power Generating, Inc. Coal Handling Areas | (21) Textile Mills, Apparel & Other Fabric Products Mfg. |
| (2) Paper & Allied Products | (15) Motor Freight, Passenger, Rail, U.S. Postal Transportation & Petroleum Bulk Oil Stations and Terminals | (22) Wood & Metal Furniture and Fixture Mfg. |
| (3) Chemical & Allied Products | (16) Water Transportation With Maintenance and/or Equipment Cleaning | (23) Printing & Publishing |
| (8) Asphalt Paving/Roofing Materials & Lubricant | (17) Ship/Boat Building or Repairing | (24) Rubber, Miscellaneous Plastic Products & Miscellaneous Mfg. |
| (9) Glass, Clay, Cement, Concrete & Gypsum Products | (18) Vehicle Maintenance, Equipment Cleaning or Deicing Areas At Air Transportation Facilities | (25) Leather Tanning & Finishing |
| (6) Primary Metals | (19) Treatment Works | (26) Fabricated Metal Products |
| (7) Metal Mining (Ore Mining & Dressing) | (20) Food & Kindred Products | (27) Transportation Equipment, Industrial Or Commercial Machinery Mfg. |
| (8) Coal Mines & Coal Mining Related | | (28) Electronic & Electrical Equipment and Components, Photographic & Optical Goods Mfg. |
| (9) Oil & Gas Extraction & Petroleum Refineries | | (29) Nonclassified Facilities |
| (10) Hazardous Waste Treatment, Storage, Disposal | | |
| (11) Landfills, Land Application Sites & Open Dumps | | |
| (12) Automobile Salvage Yards | | |
| (13) Scrap/Waste Recycling | | |

STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 006, 007, 008, 009, 010, 011 and 012

Outfall Description: Storm water, no industrial activity

SIC CODE: 2631 NAICS CODE: 322130

THESE OUTFALLS SHALL CONTAIN ONLY STORMWATER NOT ASSOCIATED WITH A REGULATED SIC CODE INDUSTRIAL ACTIVITY WHERE NO MONITORING IS REQUIRED. THERE SHALL BE NO DISCHARGE OF PROCESS WASTEWATER FROM THESE OUTFALLS.

GROUND WATER LIMITATIONS/MONITORING

GW WELL # MWB-02, MWB-07 and MWB-05 (upgradient wells); MWL-02R, MWL-03R and MWL-04 (downgradient wells)

Site Description: groundwater monitoring wells

SIC CODE: 2631 NAICS CODE: 322130

(x) Final Limits () Interim Limits Effective Dates - From: Permit Effective date To: Permit expiration date

PARAMETER	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			FREQUENCY	SAMPLE TYPE
Static Water Level	NL	0.01 ft	1/Year	Measured
Specific Conductance	NL	umhos/cm	1/Year	Grab
pH	NL	Standard units	1/Year	Grab
TOC	NL	mg/l	1/Year	Grab
Ammonia	NL	mg/l	1/Year	Grab
Nitrate	NL	mg/l	1/Year	Grab
Total Phenols	NL	ug/l	1/Year	Grab
Total Cadmium	NL	ug/l	1/Year	Grab
Total Mercury	NL	ug/l	1/Year	Grab
Color	NL	pcu	1/Year	Grab

NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/Year = Between January 1 and December 31, **due February 10 of following year.**

Grab samples - An individual sample should be taken after three (3) well volumes of ground water are removed (allowing the well to recharge between each well volume removed) or until well purging parameters (i.e. pH, temperature, and specific conductance) stabilize to $\pm 10\%$. The bailer or hose used should not contaminate samples.

The bases for the limitations/monitoring are noted in Attachment 7 of this fact sheet.

ATTACHMENT 6
SPECIAL CONDITIONS

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. Permit Reopeners

a. Chesapeake Bay Nutrients Reopener

This permit may be modified or, alternatively, revoked and reissued to incorporate new or alternative nutrient limitations and/or monitoring requirements should the State Water Control Board adopt new nutrient standards for the waterbody receiving the discharge, including the Chesapeake Bay or its tributaries, or if a future water quality regulation or statute requires new or alternative nutrient control.

b. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or, alternatively, revoked and reissued if any approved waste load allocation procedure, pursuant to section 303(d) of the Clean Water Act, imposes waste load allocations, limits or conditions on the facility that are not consistent with the requirements of this permit.

2. Operations and Maintenance (O & M) Manual

The permittee shall review the existing Operations and Maintenance (O & M) Manual and notify the DEQ Regional Office in writing within 90 days of the effective date of this permit whether it is still accurate and complete. If the O & M Manual is no longer accurate and complete, a revised O & M Manual shall be submitted for approval to the DEQ Regional Office within 90 days of the effective date of this permit. The permittee will maintain an accurate, approved operation and maintenance manual for the treatment works. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of the permit. The permittee shall operate the treatment works accordance with the approved O&M Manual. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Techniques to be employed in the collection, preservation, and analysis of effluent samples;
- b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
- c. Discussion of Best Management Practices, if applicable;
- d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I. B.10 that will prevent these materials from reaching state waters;
- e. Treatment works design, treatment works operation, routine preventative maintenance of units within the treatment system, critical spare parts inventory and record keeping; and,
- f. A plan for the management and/or disposal of waste solids and residues.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for DEQ Regional staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O & M Manual shall be deemed a violation of the permit.

Letter/Revised Manual Due: No later than October 10, 2012

3. Licensed Wastewater Operator Requirement

The permittee shall employ or contract at least one Class I licensed wastewater works operator for the facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the DEQ Regional Office, in writing, whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

4. Notification Levels

The permittee shall notify the Department as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) Five hundred micrograms per liter (500 ug/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.
 - (4) The level established by the Board.

5. Effluent Monitoring Frequencies

If the facility permitted herein is issued a Notice of Violation for any of the parameters listed below, then the following effluent monitoring frequencies shall become effective upon written notice from DEQ and remain in effect until permit expiration date.

<u>Effluent Parameter</u>	<u>Outfall</u>	<u>Frequency</u>
BOD5	001	5 Days/Week
TSS	001	5 Days/Week
Stream flow	001	5 Days/Week
Color	001	5 Days/Week

No other effluent limitations or monitoring requirements are affected by this special condition.

6. Ground Water Monitoring Plan

The permittee shall continue sampling and reporting in accordance with the ground water monitoring plan approved on February 11, 2004. The purpose of this plan is to determine if the system integrity is being maintained and to indicate if activities at the site are resulting in violations of the Board's Ground Water Standards. The approved plan is an enforceable part of the permit. Any changes to the plan must be submitted for approval to the DEQ Regional Office.

If monitoring results indicate that any unit has contaminated the ground water, the permittee shall submit a corrective action plan within 60 days of being notified by the regional office. The plan shall set forth the steps to be taken by the permittee to ensure that the contamination source is eliminated or that the contaminant plume is contained on the permittee's property. In addition, based on the extent of contamination, a risk analysis may be required. Once approved, this plan and/or analysis shall be incorporated into the permit by reference and become an enforceable part of this permit.

Monitoring Schedule:

1/Year = Between January 1 and December 31, **due February 10 of following year.**

7. Sludge Management Plan

The permittee shall maintain a sludge management plan for all sludge and solids generated at the permitted facility. **Any change in sludge management practices and procedures followed by the permittee shall be documented and submitted for DEQ staff approval 90 days prior to implementation of the changes.** Upon approval of plan changes, the revised plan becomes an enforceable part of the permit.

8. Chlorophenolic-Containing Biocides Prohibition

The use of chlorophenolic-containing biocides is not authorized by this permit.

9. Color Monitoring, Limitations and Reporting

The permittee shall monitor effluent color twice per week (see Condition I.B.5. above) via 24-hour composite. On each day the effluent color sample is taken, the stream flow shall be measured. The stream flow and corresponding effluent color measurement shall be compared to the limitations included in the table below (also in Part I.A.).

	Monthly <u>Average</u>	Daily <u>Maximum</u>
Color 528-600 cfs (PCU)	1922	2059
Color 601-700 cfs (PCU)	2184	2339
Color 701-800 cfs (PCU)	2543	2723
Color 801-900 cfs (PCU)	2901	3106
Color 901-1000 cfs (PCU)	3259	3480
Color 1001-1100 cfs (PCU)	3618	3873
Color 1101 cfs and up (PCU)	3976	4257

Effluent color limitations shall be determined and reported as follows:

All effluent color measurements taken within each bracketed flow range will be used to calculate the monthly average limit for that given flow range. The highest daily effluent color value for that same flow range shall be reported as the daily maximum. The limits for each bracketed flow range will be determined accordingly. If, during the month, there were no flows within a given bracket, an "NA" shall be reported for that bracketed flow range.

All effluent color values and river measurements shall be reported with the monthly discharge monitoring report.

10. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with

Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

11. PCB Monitoring Study

The permittee shall monitor the effluent at Outfall 001 for polychlorinated biphenyls (PCBs). These data are due no later than January 10, 2014. DEQ will use these data for development of the PCB TMDLs for the James River. The permittee shall conduct the sampling and analysis in accordance with the requirements specified below. At a minimum:

- a. Monitoring and analysis shall be conducted in accordance with the most current version of EPA Method 1668 or other equivalent methods capable of providing low-detection level, congener specific results. Any equivalent method shall be submitted to the DEQ Regional Office for review and approval prior to sampling and analysis. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.
- b. The permittee shall collect 2 wet weather samples and 2 dry weather samples.
 - (1) Wet weather samples shall be defined by the permittee based on the permittee's decision criteria for their facility. The wet weather decision criteria shall be submitted to DEQ Regional Office prior to any PCB sampling and within 90 days of the permit reissuance for review and approval. The documentation shall be available to the DEQ Regional Office upon request.
 - (2) Dry weather samples are defined as those taken at outfall 001 following at least a 72 hour period with no measurable rainfall, and influent levels are at normal base flows.
- c. Each effluent sample shall consist of a minimum 2 liter volume and be collected using either 24 hour manual or automated compositing methods. The sampling protocol shall be submitted to DEQ Regional Office for review and approval prior to the first sample collection.
- d. The data shall be submitted to DEQ Regional Office by the 10th day of the month following receipt of the results. The permittee shall have the option of submitting the results electronically. The submittal shall include the unadjusted and appropriately qualified individual PCB congener analytical results. Additionally, laboratory and field QA/QC documentation and results shall be reported. Total PCBs are to be computed as the summation of the reported, quantified congeners.
- e. If the results of this monitoring indicate actual or potential exceedances of the water quality criterion or actual exceedance of the wasteload allocation specified in the approved TMDL, and upon notification by DEQ-BRRO, the permittee shall submit for review and approval a Pollutant Minimization Plan (PMP) designed to locate and reduce sources of PCBs in the collection system. A component of the plan may include an evaluation of the PCB congener distribution in the initial source intake to determine the net contribution of PCBs introduced to the treatment works. This PMP shall be due two years from notification by DEQ that a PMP is required.

12. Oil Storage Ground Water Monitoring Reopener

As this facility currently manages ground water in accordance with 9 VAC 25-91-10 et seq., Facility and Aboveground Storage Tank (AST) Regulation, this permit does not presently impose ground water monitoring requirements. However, this permit may be modified or alternately revoked and reissued to include ground water monitoring not required by the AST regulation.

13. Closure Plan

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if the facility is permanently closed, the permittee shall submit to the DEQ Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation.

14. Permit Application Requirement

In accordance with Part II. M. of this permit, a new and complete permit application shall be submitted for the reissuance of this permit.

Application Due: No later than December 29, 2016

C. WHOLE EFFLUENT TOXICITY

I. Biological Monitoring

- a. In accordance with the schedule in 2. below, the permittee shall conduct annual acute and chronic toxicity tests for the length of the permit. The permittee will collect 24-hour flow-proportioned composite samples of final effluent from outfall 001. The acute tests to use are:

48 Hour Static Acute test using *Ceriodaphnia dubia*

These acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for calculation of a valid LC_{50} . The LC_{50} shall be reported as TU_a (Acute Toxic Units) by dividing $100/LC_{50}$ for reporting.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*

The permittee may provide additional tests. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3

- b. The test dilutions should be able to determine compliance with the following endpoint:

Acute LC_{50} of 100% equivalent to a TU_a of 1.0

Chronic NOEC of 1.59% equivalent to a TU_c of 62.8

- c. The test data will be evaluated for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests of 1.a. may be discontinued.
- d. All applicable data will be reevaluated for reasonable potential at the end of the permit term.
- e. If, in the testing according to C.1., any toxicity tests are invalidated, the tests shall be repeated within the testing period that the original test was taken, or if already past that period, within

thirty (30) days of notification. If there is no discharge during this period, a sample must be taken during the first discharge.

2. Reporting Schedule:

The permittee shall report the results and supply a copy of the toxicity test reports specified in this WET in accordance with the following schedule:

<u>Test Period</u>	<u>Compliance Period</u>	<u>DMR/Report Submission Date</u>
Annual 1	1/1/2012 to 12/31/2012	by 1/10/2013
Annual 2	1/1/2013 to 12/31/2013	by 7/10/2014
Annual 3	1/1/2014 to 12/31/2014	by 7/10/2015
Annual 4	1/1/2015 to 12/31/2015	by 7/10/2016
Annual 5	1/1/2016 to 12/31/2016	by 7/10/2017

D. STORM WATER MANAGEMENT CONDITIONS

1. Storm Water Management Evaluation

The Storm Water Pollution Prevention Plan (SWPPP), which is to be maintained in accordance with Part I.D.3. of this permit, shall have a goal of reducing pollutants discharged from all the regulated storm water outfalls. One goal of the SWPPP shall place emphasis on reducing, to the maximum extent practical, the following pollutants in the outfalls noted below.

<u>OUTFALL NO.</u>	<u>POLLUTANTS</u>	<u>COMPARATIVE VALUE</u>
002 and 005	BOD5	30 mg/l
	Total Recoverable Iron	1 mg/l
	TSS	100 mg/l
003 and 004	BOD5	30 mg/l

The effectiveness of the SWPPP will be evaluated via the required monitoring for all parameters listed in Part I.A. of this permit for the regulated storm water outfalls, including the specific pollutants noted above.

Monitoring results that are above the comparative value for the specific pollutants above will not indicate unacceptable values. However, those results will justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized for the affected outfalls. In addition, the permittee shall amend the SWPPP whenever there is a change in the facility or its operation that materially increases the potential for activities to result in a discharge of significant amounts of pollutants.

2. General Storm Water Special Conditions

a. Sample Type

For all storm water monitoring required in Part I A or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such samples shall be collected from the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site). The required 72-hour storm event interval is waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

b. Recording of Results

For each measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

- (1) The date and duration (in hours) of the storm event(s) sampled;
- (2) The rainfall total (in inches) of the storm event which generated the sampled discharge; and
- (3) The duration between the storm event sampled and the end of the previous measurable storm event.

In addition, the permittee shall maintain a monthly log documenting the amount of rainfall received at this facility on a daily basis. A summarization of this information shall also be submitted with the DMRs.

c. Sampling Waiver

When a permittee is unable to collect storm water samples required in Part I A or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

d. Representative Discharges.

When a facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, the permittee may test the effluent of one of such outfalls and report that the quantitative data also apply to the substantially identical outfall(s) provided that: (1) the representative outfall determination has been approved by DEQ prior to data submittal; and, (2) the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents.

e. Quarterly Visual Examination of Storm Water Quality

- (1) The permittee must perform and document a quarterly visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination must be made during daylight hours (e.g., normal working hours). If no storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. The documentation must be signed and certified in accordance with Part II K of this permit.
- (2) Visual examinations must be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging from the facility. The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on the samples. All samples (except snowmelt samples) must be collected from the discharge resulting from a storm event that results in an actual discharge from the site (defined as a "measurable storm event"), and that occurs at least 72 hours from the previously measurable storm event. The 72-hour storm interval is waived if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term. If no qualifying storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no qualifying storm event occurred during daylight hours that resulted in storm water runoff during that quarter. The documentation must be signed and certified in accordance with Part II K.
- (3) The visual examination reports must be maintained on-site with the Storm Water Pollution Prevention Plan (SWPPP). The report must include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the

storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

- (4) If the facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, the permittee may conduct visual monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.
 - (5) When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).
- f. Allowable Non-Storm Water Discharges
- (1) The following non-storm water discharges are authorized by this permit provided the non-storm water component of the discharge is in compliance with f(2) below:
 - (a) Discharges from fire fighting activities;
 - (b) Fire hydrant flushings;
 - (c) Potable water including water line flushings;
 - (d) Uncontaminated air conditioning or compressor condensate;
 - (e) Irrigation drainage;
 - (f) Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
 - (g) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
 - (h) Routine external building wash down which does not use detergents;
 - (i) Uncontaminated ground water or spring water;
 - (j) Foundation or footing drains where flows are not contaminated with process materials; and
 - (k) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).
 - (2) Except for flows from fire fighting activities, the Storm Water Pollution Prevention Plan must include:
 - (a) Identification of each allowable non-storm water source;
 - (b) The location where the non-storm water is likely to be discharged; and
 - (c) Descriptions of appropriate BMPs for each source.
 - (3) If mist blown from cooling towers is included as one of the allowable non-storm water discharges from the facility, the permittee must specifically evaluate the discharge for the presence of chemicals used in the cooling tower. The evaluation shall be included in the SWPPP.
- g. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities
- The discharge of hazardous substances or oil in the storm water discharge(s) from the facility shall be prevented or minimized in accordance with the storm water pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 or § 62.1-44.34:19 of the Code of Virginia. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period:
- (1) The permittee is required to notify the Department in accordance with the requirements of Part II G as soon as he or she has knowledge of the discharge;

- (2) Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner or the MS4; and
 - (3) The storm water pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.
- h. Additional Requirements for Salt Storage
- Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes shall be enclosed or covered to prevent exposure to precipitation. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles shall be located on an impervious surface. All runoff from the pile, and/or runoff that comes in contact with salt, including under drain systems, shall be collected and contained within a bermed basin lined with concrete or other impermeable materials, or within an underground storage tank(s), or within an above ground storage tank(s), or disposed of through a sanitary sewer (with the permission of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated storm water be allowed to discharge directly to the ground or to state waters.

3. Storm Water Pollution Prevention Plan

Refer to Part I D 4 for sector-specific storm water management requirements.

A storm water pollution prevention plan (SWPPP) for the facility was required to be developed and implemented under the previous permit. The existing storm water pollution prevention plan shall be reviewed and modified, as appropriate, to conform to the requirements of this section. Permittees shall implement the provisions of the storm water pollution prevention plan as a condition of this permit. The storm water pollution prevention plan requirements of this permit may be fulfilled, in part, by incorporating by reference other plans or documents such as a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act, or best management practices (BMP) programs otherwise required for the facility, provided that the incorporated plan meets or exceeds the plan requirements of Part I D.3.a (Contents of the Plan). All plans incorporated by reference into the storm water pollution prevention plan become enforceable under this permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP of Part I D.3.a the permittee shall develop the missing SWPPP elements and include them in the required plan.

a. Contents of the Plan

The contents of the SWPPP shall comply with the requirements listed below and those in Part I D.4. The plan shall include, at a minimum, the following items:

- (1) Pollution Prevention Team. The plan shall identify the staff individuals by name or title that comprise the facility's storm water pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising, and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.
- (2) Site Description. The plan shall include the following:
 - (a) Activities at the Facility. A description of the nature of the industrial activities at the facility.
 - (b) General Location Map. A general location map (e.g., USGS quadrangle or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility.
 - (c) Site Map. A site map identifying the following:
 - (i) The size of the property (in acres);
 - (ii) The location and extent of significant structures and impervious surfaces (roofs, paved areas and other impervious areas);
 - (iii) Locations of all storm water conveyances including ditches, pipes, swales, and inlets, and the directions of storm water flow (use arrows to show which ways storm water will flow);
 - (iv) Locations of all existing structural and source control BMPs;
 - (v) Locations of all surface water bodies, including wetlands;
 - (vi) Locations of potential pollutant sources identified under Part I D 3 a (3);
 - (vii) Locations where significant spills or leaks identified under Part I D 3 a (4) have occurred;

- (viii) Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; transfer areas for substances in bulk; and machinery;
 - (ix) Locations of storm water outfalls and an approximate outline of the area draining to each outfall, and location of municipal storm sewer systems, if the storm water from the facility discharges to them;
 - (x) Location and description of all non-storm water discharges;
 - (xi) Location of any storage piles containing salt used for deicing or other commercial or industrial purposes; and
 - (xii) Locations and sources of runoff to the site from adjacent property where the runoff contains significant quantities of pollutants. The permittee shall include an evaluation with the SWPPP of how the quality of the storm water running onto the facility impacts the facility's storm water discharges.
- d) Receiving Waters and Wetlands. The name of all surface waters receiving discharges from the site, including intermittent streams, dry sloughs, and arroyos. Provide a description of wetland sites that may receive discharges from the facility. If the facility discharges through a municipal separate storm sewer system (MS4), identify the MS4 operator, and the receiving water to which the MS4 discharges.
- (3) Summary of Potential Pollutant Sources. The plan shall identify each separate area at the facility where industrial materials or activities are exposed to storm water. Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description shall include:
- (a) Activities in Area. A list of the activities (e.g., material storage, equipment fueling and cleaning, cutting steel beams); and
 - (b) Pollutants. A list of the associated pollutant(s) or pollutant constituents (e.g., crankcase oil zinc, sulfuric acid, cleaning solvents, etc.) for each activity. The pollutant list shall include all significant materials handled, treated, stored or disposed that have been exposed to storm water in the three years prior to the date this SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.
- (4) Spills and Leaks. The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to storm water discharges can occur and their corresponding outfalls. The plan shall include a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance during the three-year period prior to the date this SWPPP was prepared or amended. The list shall be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills and leaks include releases of oil or hazardous substances in excess of reportable quantities, and may also include releases of oil or hazardous substances that are not in excess of reporting requirements.
- (5) Sampling Data. The plan shall include a summary of existing storm water discharge sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous permit term.
- (6) Storm Water Controls.
- (a) BMPs shall be implemented for all the areas identified in Part I D 3 a (3) (Summary of Potential Pollutant Sources) to prevent or control pollutants in storm water discharges from the facility. All reasonable steps shall be taken to control or address the quality of discharges from the site that may not originate at the facility. The SWPPP shall describe the type, location and implementation of all BMPs for each area where industrial materials or activities are exposed to storm water. Selection of BMPs shall take into consideration:
 - (i) That preventing storm water from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from storm water;
 - (ii) BMPs generally shall be used in combination with each other for most effective water quality protection;

- (iii) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;
 - (iv) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care must be taken to avoid ground water contamination);
 - (v) Flow attenuation by use of open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
 - (vi) Conservation or restoration of riparian buffers will help protect streams from storm water runoff and improve water quality; and
 - (vii) Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.
- (b) Control Measures. The permittee shall implement the following types of BMPs to prevent and control pollutants in the storm water discharges from the facility, unless it can be demonstrated and documented that such controls are not relevant to the discharges (e.g., there are no storage piles containing salt).
- (i) Good Housekeeping. The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to storm water discharges. Typical problem areas include areas around trash containers, storage areas, loading docks, and vehicle fueling and maintenance areas. The plan shall include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers. The introduction of raw, final or waste materials to exposed areas of the facility shall be minimized to the maximum extent practicable. The generation of dust, along with off-site vehicle tracking of raw, final or waste materials, or sediments, shall be minimized to the maximum extent practicable.
 - (ii) Eliminating and Minimizing Exposure. To the extent practicable, industrial materials and activities shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt, and runoff. Note: Eliminating exposure at all industrial areas may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9 VAC 25-31-120 E, thereby eliminating the need to have a permit.
 - (iii) Preventive Maintenance. The permittee shall have a preventive maintenance program that includes **regular** inspection, testing, maintenance and repairing of all industrial equipment and systems to avoid breakdowns or failures that could result in leaks, spill and other releases. This program is in addition to the specific BMP maintenance required under Part I D 3 b (Maintenance of BMPs).
 - (iv) Spill Prevention and Response Procedures. The plan shall describe the procedures that will be followed for preventing and responding to spills and leaks.
 - (A) Preventive measures include barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
 - (B) Response procedures shall include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the Pollution Prevention Team.
 - (C) Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP, and in other locations where it will be readily available.
 - (v) Routine Facility Inspections. Facility personnel who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at the facility, and who can also evaluate the effectiveness of BMPs shall regularly inspect all areas of the facility where industrial materials or activities are exposed to storm water. These inspections are in addition to, or as part of, the comprehensive site evaluation required under Part I D 3 c. At least one member of the Pollution Prevention Team shall participate in the routine facility inspections. The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the

Department for less frequent intervals. At least once each calendar year, the routine facility inspection must be conducted during a period when a storm water discharge is occurring. Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but not later than within 30 days of the inspection, unless permission for a later date is granted in writing by the Director. The results of the inspections shall be documented in the SWPPP, along with the date(s) and description(s) of any corrective actions that were taken in response to any deficiencies or opportunities for improvement that were identified.

(vi) Employee Training. The permittee shall implement a storm water employee training program for the facility. The SWPPP shall include a schedule for all types of necessary training, and shall document all training sessions and the employees who received the training. Training shall be provided for all employees who work in areas where industrial materials or activities are exposed to storm water, and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel, etc.). The training shall cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, BMP operation and maintenance, etc. The SWPPP shall include a summary of any training performed.

(vii) Sediment and Erosion Control. The plan shall identify areas at the facility that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, and/or stabilization BMPs to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.

(viii) Management of Runoff. The plan shall describe the storm water runoff management practices (i.e., permanent structural BMPs) for the facility. These types of BMPs are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in storm water discharges from the site.

Structural BMPs may require a separate permit under §404 of the CWA and the Virginia Water Protection Permit Program Regulation (9 VAC 25-210) before installation begins.

b. Maintenance.

All BMPs identified in the SWPPP shall be maintained in effective operating condition. Storm water BMPs identified in the SWPPP shall be observed during active operation (i.e., during a storm water runoff event) to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP. The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all BMPs, and shall include a description of the back-up practices that are in place should a runoff event occur while a BMP is off-line. The effectiveness of nonstructural BMPs shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

If site inspections required by Part I D 3 a(6)(b)(v) (Routine Facility Inspections) or Part I D 3 c (Comprehensive Site Compliance Evaluation) identify BMPs that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of maintenance and repairs of BMPs, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, and for repairs, date(s) that the BMP(s) returned to full function, and the justification for any extended maintenance or repair schedules.

c. Comprehensive Site Compliance Evaluation.

The permittee shall conduct comprehensive site compliance evaluations at least once a year. The evaluations shall be done by qualified personnel who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at the facility, and who can also evaluate the effectiveness of BMPs. The personnel conducting the evaluations may be either facility employees or outside constituents hired by the facility.

(1) Scope of the Compliance Evaluation. Evaluations shall include all areas where industrial materials or activities are exposed to storm water, as identified in Part I D 3 a(3). The personnel shall evaluate:

(a) Industrial materials, residue or trash that may have or could come into contact with storm water;

- (b) Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;
 - (c) Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;
 - (d) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;
 - (e) Evidence of, or the potential for, pollutants entering the drainage system;
 - (f) Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring;
 - (g) Review of training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs;
 - (h) Results of both visual and any analytical monitoring done during the past year shall be taken into consideration during the evaluation.
- (2) Based on the results of the evaluation, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by Part I D 3 a(2)(c); revise the description of controls required by Part I D 3 a(6) to include additional or modified BMPs designed to correct problems identified). Revisions to the SWPPP shall be completed within 30 days following the evaluation, unless permission for a later date is granted in writing by the Director. If existing BMPs need to be modified or if additional BMPs are necessary, implementation shall be completed before the next anticipated storm event, if practicable, but not more than 60 days after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the Department;
 - (3) Compliance Evaluation Report: A report shall be written summarizing the scope of the evaluation, name(s) of personnel making the evaluation, the date of the evaluation, and all observations relating to the implementation of the SWPPP, including elements stipulated in Part I D 3 c(1) (a) through (f) above. Observations shall include such things as: the location(s) of discharges of pollutants from the site; location(s) of previously unidentified sources of pollutants; location(s) of BMPs that need to be maintained or repaired; location(s) of failed BMPs that need replacement; and location(s) where additional BMPs are needed. The report shall identify any incidents of noncompliance that were observed. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part II K and maintained with the SWPPP.
 - (4) Where compliance evaluation schedules overlap with routine inspections required under Part I D 3 a(6)(b)(v), the annual compliance evaluation may be used as one of the routine inspections.
- d. Signature and Plan Review.
- (1) Signature/Location. The SWPPP shall be signed in accordance with Part II K, dated, and retained on-site at the facility covered by this permit in accordance with Part II D 2. All other changes to the SWPPP, and other permit compliance documentation, must be signed and dated by the person preparing the change or documentation.
 - (2) Availability. The permittee shall make the SWPPP, annual site compliance evaluation report, and other information available to the Department upon request.
 - (3) Required Modifications. The Director may notify the permittee at any time that the SWPPP, BMPs, or other components of the facility's storm water program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met, and may include required modifications to the storm water program, additional monitoring requirements, and special reporting requirements. The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a later date is granted in writing by the Director, and shall submit a written certification to the Director that the requested changes have been made.
- e. Maintaining an Updated SWPPP.
- (1) The permittee shall review and amend the SWPPP as appropriate whenever:
 - (a) There is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility;
 - (b) Routine inspections or compliance evaluations determine that there are deficiencies in the BMPs;
 - (c) Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;
 - (d) There is a spill, leak or other release at the facility; or

- (e) There is an unauthorized discharge from the facility.
- (2) SWPPP modifications shall be made within 30 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified BMPs (distinct from regular preventive maintenance of existing BMPs described in Part I D 3 a(6)(b)(iii)) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the Director. The amount of time taken to modify a BMP or implement additional BMPs shall be documented in the SWPPP.
- (3) If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part II G of this permit.

4. Sector-Specific Storm Water Pollution Prevention Plan Requirements

In addition to the requirements of Part I D 3, the SWPPP shall include, at a minimum, the following items:

a. Site Description.

- (1) Site Map. The site map shall identify where any of the following activities may be exposed to precipitation/surface runoff: storage or disposal of wastes such as spent solvents/baths, sand, slag/dross; liquid storage tanks/drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw materials such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate sources where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal/coke handling operations, etc., and that could result in a discharge of pollutants to surface waters.
- (2) Summary of Potential Pollutant Sources. The inventory of materials handled at the site that potentially may be exposed to precipitation/runoff shall include areas where deposition of particulate matter from process air emissions or losses during material handling activities are possible.

b. Storm Water Controls.

- (1) Good Housekeeping. The SWPPP shall consider implementation of the following measures, or equivalent measures, where applicable.
 - (a) Establishment of a cleaning/maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading/unloading, storage, handling, and processing occur.
 - (b) The paving of areas where vehicle traffic or material storage occur, but where vegetative or other stabilization methods are not practicable. Sweeping programs shall be instituted in these areas as well.
 - (c) For unstabilized areas of the facility where sweeping is not practical, the permittee shall consider using storm water management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures, that effectively trap or remove sediment.
- (2) Routine Facility Inspections. Inspections shall be conducted monthly, and shall address all potential sources of pollutants, including (if applicable):
 - (a) Air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones) shall be inspected for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. The permittee shall consider monitoring air flow at inlets/outlets, or equivalent measures, to check for leaks (e.g., particulate deposition) or blockage in ducts;
 - (b) All process or material handling equipment (e.g., conveyors, cranes, and vehicles) shall be inspected for leaks, drips, or the potential loss of materials; and
 - (c) Material storage areas (e.g., piles, bins or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks/drums) shall be examined for signs of material losses due to wind or storm water runoff.

ATTACHMENT 7

EFFLUENT/GROUND WATER LIMITATIONS/MONITORING RATIONALE/SUITABLE DATA

THE EFFLUENT LIMITATIONS AND MONITORING RATIONALE ARE BASED ON THE FOLLOWING:

Outfall 001

FLOW – There is no limit on flow. The flow (30 day max. avg.) from the wastewater treatment plant is 6.57 million gallons per day (MGD). Flow monitoring is continuous by recording equipment (in MGD). This monitoring frequency and sample type should be appropriate for proper assessment of the facility's flow regime and potential discharge impacts.

pH - The limits of 6.0 S.U. (minimum) to 9.0 S.U. (maximum) are based on water quality (WQS for Class III streams) and technology [Federal Effluent Guidelines for Pulp, Paper, and Paperboard Point Source Categories (40 CFR 430)], are carried over from the previous permit and are protective of water quality standards. The monitoring frequency is set at five days per week and the sample type is grab (required for pH). This monitoring frequency and sample type should provide enough data for proper assessment of compliance with the effluent limits and water quality standards.

BOD5 - The limits of 1555 kg/day (monthly average) and 3110 kg/day (daily maximum) are based on the requirements contained in the Water Quality Management Plan that addresses this section of the James River. These limitations are more stringent than those allowed by the federal effluent guidelines, which have been developed below for comparative purposes. The monitoring frequency is once per week, which is based on a reduced monitoring frequency previously granted for good plant performance. The sample type remains at 24-hour composite. This monitoring frequency and sample type should provide enough data for proper assessment of compliance with the effluent limits and water quality standards.

Federal Effluent Guidelines Limitations Development for BOD5

Federal effluent guidelines for the "Pulp, Paper, and Paperboard" point source category, subpart F (Semi-Chemical Subcategory - 40 CFR 430.60) express the BOD5 limits in terms of average production (pounds of BOD5/1000 pounds of product) and the best conventional control technology (BCT - 430.63) limits are the same as the best practical control technology (BPT - 430.62) limits. The best available control technology (BAT - 430.64) limits only address facilities that use chlorophenolic-containing biocides, which Grief does not use (thus there are no limits for pentachlorophenol and trichlorophenol). The product from paper machine no. 1 is based upon these guidelines. Paper machine no. 1 produces 820 tons/day. The following limitations for BOD5 were calculated.

$$\text{Daily Max.} = \frac{8.7 \text{ lbs. BOD5}}{1000 \text{ lbs. product}} \times \frac{820 \text{ tons product}}{\text{day}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{0.4536 \text{ kg}}{\text{lb.}} = 6472 \text{ kg/day}$$

$$\text{Monthly Avg.} = \frac{4.35 \text{ lbs. BOD5}}{1000 \text{ lbs. product}} \times \frac{820 \text{ tons product}}{\text{day}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{0.4536 \text{ kg}}{\text{lb.}} = 3236 \text{ kg/day}$$

Federal effluent guidelines for the "Pulp, Paper, and Paperboard" point source category, subpart J (Secondary Fiber Non-Deink Subcategory, Corrugating Medium Subdivision - 40 CFR 430.100) also express the BOD5 limits in terms of average production (pounds of BOD5/1000 pounds of product). In this case, new source performance standards (NSPS - 430.105) apply to paper machine #2 as it was constructed and began producing wastewater after promulgation of the federal effluent guidelines. As noted above, since Grief does not utilize chlorophenolic-containing biocides, limits for pentachlorophenol and trichlorophenol are not applicable. The product from paper machine no. 2 is based upon these guidelines. Paper machine no. 2 produces 470 tons/day. The following limitations for BOD5 were calculated.

$$\text{Daily Max.} = \frac{3.9 \text{ lbs. BOD5}}{1000 \text{ lbs. product}} \times \frac{470 \text{ tons product}}{\text{day}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{0.4536 \text{ kg}}{\text{lb.}} = 1663 \text{ kg/day}$$

$$\text{Monthly Avg.} = \frac{2.1 \text{ lbs. BOD5}}{1000 \text{ lbs. product}} \times \frac{470 \text{ tons product}}{\text{day}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{0.4536 \text{ kg}}{\text{lb.}} = 895 \text{ kg/day}$$

The combined federal effluent guidelines BOD5 limitations for outfall 001 are the sum of the mass loadings (kg/day) for paper machines nos. 1 and 2, as noted below.

$$\text{Daily Max. for BOD5} = 6472 \text{ kg/day (Machine 1)} + 1663 \text{ kg/day (Machine 2)} = 8135 \text{ kg/day}$$

$$\text{Monthly Avg. for BOD5} = 3236 \text{ kg/day (Machine 1)} + 895 \text{ kg/day (Machine 2)} = 4131 \text{ kg/day}$$

TSS - The limits of 5072 kg/day (monthly average) and 10,059 kg/day (daily maximum) are based on federal effluent guidelines for the "Pulp, Paper, and Paperboard" point source category, as developed below. The monitoring frequency is once per week, which is based on a reduced monitoring frequency previously granted for good plant performance. The sample type remains at 24-hour composite. This monitoring frequency and sample type should provide enough data for proper assessment of compliance with the effluent limits. A discussion of how the TSS limits were derived follows.

Federal effluent guidelines for the "Pulp, Paper, and Paperboard" point source category, subpart F (Semi-Chemical Subcategory - 40 CFR 430.60) express the TSS limits in terms of average production (pounds of TSS/1000 pounds of product) and the best conventional control technology (BCT - 430.63) limits are the same as the best practical control technology (BPT - 430.62) limits. The best available control technology (BAT - 430.64) limits only address facilities that use chlorophenolic-containing biocides, which Grief does not use (thus there are no limits for pentachlorophenol and trichlorophenol). The product from paper machine no. 1 is based upon these guidelines. Paper machine no. 1 produces 820 tons/day. The following limitations for TSS were calculated.

$$\text{Daily Max.} = \frac{11.0 \text{ lbs. TSS}}{1000 \text{ lbs. product}} \times \frac{820 \text{ tons product}}{\text{day}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{0.4536 \text{ kg}}{\text{lb.}} = 8183 \text{ kg/day}$$

$$\text{Monthly Avg.} = \frac{5.5 \text{ lbs. TSS}}{1000 \text{ lbs. product}} \times \frac{820 \text{ tons product}}{\text{day}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{0.4536 \text{ kg}}{\text{lb.}} = 4091 \text{ kg/day}$$

Federal effluent guidelines for the "Pulp, Paper, and Paperboard" point source category, subpart J (Secondary Fiber Non-Deink Subcategory, Corrugating Medium Subdivision - 40 CFR 430.100) also express the TSS limits in terms of average production (pounds of TSS/1000 pounds of product). In this case, new source performance standards (NSPS - 430.105) apply to paper machine #2 as it was constructed and began producing wastewater after promulgation of the federal effluent guidelines. As noted above, since Grief does not utilize chlorophenolic-containing biocides, the limits for pentachlorophenol and trichlorophenol are not applicable. The product from paper machine no. 2 is based upon these guidelines. Paper machine no. 2 produces 470 tons/day. The following limitations for TSS were calculated.

$$\text{Daily Max.} = \frac{4.4 \text{ lbs. TSS}}{1000 \text{ lbs. product}} \times \frac{470 \text{ tons product}}{\text{day}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{0.4536 \text{ kg}}{\text{lb.}} = 1876 \text{ kg/day}$$

$$\text{Monthly Avg.} = \frac{2.3 \text{ lbs. TSS}}{1000 \text{ lbs. product}} \times \frac{470 \text{ tons product}}{\text{day}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{0.4536 \text{ kg}}{\text{lb.}} = 981 \text{ kg/day}$$

The combined federal effluent guidelines TSS limitations for outfall 001 are the sum of the mass loadings (kg/day) for paper machines nos. 1 and 2, as noted below.

$$\text{Daily Max. for TSS} = 8183 \text{ kg/day (Machine 1)} + 1876 \text{ kg/day (Machine 2)} = 10,059 \text{ kg/day}$$

$$\text{Monthly Avg. for TSS} = 4091 \text{ kg/day (Machine 1)} + 981 \text{ kg/day (Machine 2)} = 5072 \text{ kg/day}$$

COLOR - A series of color limits based on various river flow regimes was developed with the past permit reissuance (justification of limits development provided below). EPA had submitted a general objection dated May 4, 2001 on a previous draft permit and followed up with a specific objection dated September 25, 2001. The objection was based on the originally proposed color limit which was based on in-stream rise. The newly developed series of color limits was subsequently approved by EPA. Based on the new stream flow data and effluent flows, the previously developed limits should still be appropriate (i.e., no significant changes in stream or effluent flows) and are therefore being carried forth with this permit reissuance. The monitoring frequency is twice per week, which is based on a reduced monitoring frequency previously granted for good plant performance. The sample type remains at 24-hour composite. This monitoring frequency and sample type should provide enough data for proper assessment of compliance with the effluent limits and water quality standards.

Color Limitations Development and Justification

The Virginia Department of Environmental Quality's (DEQ) Water Quality Standards (9 VAC 25-260-00 et seq.) do not currently contain a numerical standard for color. However, the narrative portion of the Water Quality Standards, section 9 VAC 25-260-20 (General Criteria), notes that "All state waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other wastes in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such waters or which are inimical or harmful to human, animal, plant, or aquatic life." Specific substances noted for control include "substances that produce color". Designated uses for all State waters include: recreation (as swimming and boating); the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them; wildlife; and, the production of edible and marketable natural resources.

A previous study, dated 1991, was conducted to evaluate the effect of color from Greif Packaging's effluent (then Virginia Fibre's) on the James River. The study provided an analysis of the effluent on the aquatic community within the stream. A final report entitled "Artificial Streams Studies and Sampling of the James River to Evaluate Color Effects from Virginia Fibre's Treated Effluent" was provided to the State Water Control Board (DEQ). The report concluded that there was no significant effect on the biological community as a result of the color in the effluent. Based on the report conclusion, there appears to be no significant biological/toxic effect on the stream associated with the current color levels in the discharge (which, on a monthly average, are even a little lower than in 1991). This would demonstrate compliance with that portion of the narrative water quality standard which notes "in concentrations, amounts, or combinations ... which are inimical or harmful to ... aquatic life."

The portion of the narrative water quality standard which notes "in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such waters or which are inimical or harmful to human, animal, plant ... life." must be addressed. Currently, there are no existing downstream users in close proximity to the discharge which are impacted. The nearest water withdrawal point is approximately 55 miles downstream (Solite Corp.) which is not for potable use. (There is a 1.36-mile segment of the James that is designated for public water supply which runs from the confluence of the State River downstream to Fork Union Sanitary District's water intake near the Route 15 bridge. This segment is more than 55 miles downstream of the Greif site.) Also, when the State Water Control Board first issued the permit to Greif Brothers (Virginia Fibre at the time), they considered the aesthetic concern. The Board reportedly looked at levels of color in clear glass jars and noted that the one with a color level of 35 PCUs did not appear to be objectionable for a stream (from that came the existing limitation of a "maximum in-stream color rise of 35 PCUs). Based on the Board's decision, the effluent limits being developed assumed a zero for background color. This "limit" addressed that portion of the narrative water quality standard which addressed "designated uses".

A flow frequency determination memorandum dated November 3, 2000 from Paul E. Herman, P.E. contained the following flow values:

1Q10	428 cfs = 275.36 MGD	7Q10	528 cfs = 341.28 MGD
1Q10 high flow	900 cfs = 581.72 MGD	7Q10 high flow	1063 cfs = 687.08 MGD
High flow period = January through May			

Storet data [station ID no. 2-JMS258.54 (near Lynchburg)] contain 140 color measurements from 6/12/90 to 6/7/01. The minimum reading was 3 PCUs, the maximum was 460 PCUs and the average was 50.62 PCUs. There was a significant difference between the minimum and maximum values so, for limitations development purposes, the background was assumed as zero, based on the Board's determination of aesthetic quality.

It was proposed to provide the facility with tiered limits for color based on receiving stream flow and dilution. The tiers are bracketed from 528 cfs (7Q10 flow value) to 600 cfs, 601 to 700 cfs, 701 to 800 cfs, 801 to 900 cfs, 901 to 1000 cfs, 1001 to 1100 cfs and 1101 cfs and up, using the low value in each tier for calculation of the limits. The resultant limits are year round. As the limits are based on dilution with the receiving stream flow, it will be required that the company obtain stream flow rates on those days of discharge when color monitoring is conducted.

Effluent flow data were evaluated from January 1, 1999 through December 2001 (most representative). Both the monthly average and the daily flow values were arranged in order from the highest to the lowest and the 97th percentile values were

selected (see attached data). Ninety-seventh percentile values of 5.41 MGD (monthly average) and 5.9 MGD (daily maximum) were used in the calculation of effluent color limits.

The facility is currently allowed a 35-PCU in-stream rise above background, which is a maximum value allowed. Federal regulations require both monthly average and daily maximum limits for industrial facilities. In that regard, the monthly average limit was based on a 30-PCU in-stream rise, assuming zero background color and the daily maximum limit was based on the previously established 35-PCU in-stream rise, again, assuming zero background color. The mix calculations assumed a linear relationship. The resulting limits were expected to allow adequate light penetration.

A straight dilution formula, as noted below, was used in deriving the potential effluent limitations.

$$C_{\text{eff}} = \frac{[Q_{\text{eff}} + Q_{\text{str}}] \times C_{\text{mix}}}{Q_{\text{eff}}} \quad \text{Where} \quad \begin{array}{l} C_{\text{eff}} = \text{color in effluent (PCUs)} \\ Q_{\text{eff}} = \text{effluent flow (MGD)} \\ Q_{\text{str}} = \text{stream flow (MGD)} \\ C_{\text{mix}} = \text{color in stream after mixing (PCUs)} \end{array}$$

Based on the above stated conditions, the following potential effluent color limitations were calculated.

MONTHLY AVERAGE (Effluent Flow = 5.41 MGD)		DAILY MAXIMUM (Effluent Flow = 5.9 MGD)	
STREAM FLOW (CFS)	Allowable Rise = 30 PCUs	STREAM FLOW (CFS)	Allowable Rise = 35 PCUs
528 – 600 (528 cfs = 341.27 mgd)	1922	528 – 600 (528 cfs = 341.27 mgd)	2059
601 – 700 (623 cfs = 388.46 mgd)	2184	601 – 700 (623 cfs = 388.46 mgd)	2339
701 – 800 (701 cfs = 453.10 mgd)	2543	701 – 800 (701 cfs = 453.10 mgd)	2723
801 – 900 (801 cfs = 517.73 mgd)	2901	801 – 900 (801 cfs = 517.73 mgd)	3106
901 – 1000 (901 cfs = 582.37 mgd)	3259	901 – 1000 (901 cfs = 582.37 mgd)	3480
1001 – 1100 (1001 cfs = 647.00 mgd)	3618	1001 – 1100 (1001 cfs = 647.00 mgd)	3873
1101 & up (1101 cfs = 711.64 mgd)	3976	1101 & up (1101 cfs = 711.64 mgd)	4257

Based on effluent color data and the associated stream flow data for the period of January 1999 through December 2001, there would have been no violations of the proposed monthly average limitation and one (1) month which would have exceeded the proposed daily maximum limit (November 2001 had a daily value of 3640 PCUs with associated stream flows of 858 cfs).

NUTRIENTS – This facility is a significant discharger of nutrients to the Chesapeake Bay watershed. However, Greif applied for coverage under the “General Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed” on December 29, 2006. That permit has an effective date of January 1, 2007. That general permit contains all the necessary limits and monitoring requirements for Greif. The nutrient monitoring requirements contained in the general permit for Greif are noted in the DMR for their general permit which has been incorporated into this attachment.

Parameters reviewed for possible monitoring or limits

The table below shows the results of additional (non-permitted) parameters detected at Outfall 001 during the analyses performed for the application process. These were also evaluated for possible permit limits.

Parameter	Application Data	WLA	Comments
Ammonia	0.2 mg/l	16.1 mg/l (acute) 6.74 mg/l (chronic)	Value well below the acute and chronic WLA. STATS verified that no limits are necessary.
Organic nitrogen	0.3 mg/l	No water quality standard	Value relatively low and no standard therefore, no limits are necessary.
Nitrate-nitrite	1.5 mg/l	No applicable water quality standard	Value relatively low and no standard therefore, no limits are necessary.
Sulfate	142 mg/l	No applicable water quality standard	Water quality standard of 250 mg/l is applicable to waters designated as public water supplies, which this is not. In addition, the value is only half the standard therefore, no limits are necessary.
Total iron	ND	No applicable water quality standard	Water quality standard of 300 µg/l is applicable to waters designated as public water supplies, which this is not. In addition, the value is very low therefore, no limits are necessary.
Total magnesium	4.2 mg/l	No water quality standard	Value very low and no standard therefore, no limits are necessary.
Total phosphorus	3.3 mg/l	Covered by GP	Covered by GP; therefore, no limits are necessary.
Bis (2-ethyl-hexyl) Phthalate	0.03 mg/l		Value somewhat low, therefore no limits are necessary.

Evaluation for Reduced Monitoring Due to Exemplary Facility Operations

In accordance with the VPDES permit manual, facilities having exemplary operations that consistently meet permit requirements are eligible for reduced permit monitoring. With this reissuance, an evaluation was completed to determine if the facility was eligible. Two factors are evaluated for eligibility. The first is "Did the facility receive any form of compliance notice of violation?" and the second is based on effluent quality. During the last permit term, it was not necessary to issue any compliance Notice of Violation letters. The facility qualified for reduced monitoring for BOD₅, TSS and color in the previous reissuance which is being carried forward. Should the compliance status change for this facility, a condition has been added to reinstate the original monitoring frequency.

Storm Water Outfalls 002-012

Guidance Memo 96-001 recommends that chemical-specific water quality-based limits not be placed on storm water outfalls at this time because the methodology for developing limits and the proper method of sampling is still a concern and under review/reevaluation by EPA. Exceptions would be where a VPDES permit for a storm water discharge has been issued that includes effluent limitations (backsliding must be considered before these limitations can be modified) and where there are reliable data, obtained using sound, scientifically defensible procedures, which provide the justification and defense for an effluent limitation. Therefore, in lieu of limitations, pollutants are assessed against screening criteria developed solely to identify those pollutants that should be given special emphasis during development and assessment of the Storm Water Pollution Prevention Plan (SWPPP).

Each screening criterion is established as the most stringent of either (1) two times the applicable pollutant's acute criterion, (2) the pollutants waste load allocation, on the basis of the discharge going to a large receiving stream and utilizing conservative assumptions (i.e., Tier 2) or, where applicable, (3) the pollutant's benchmark monitoring

concentration as contained in DEQ's VPDES general permit for storm water associated with industrial activity. Any storm water outfall effluent data submitted by the permittee that contained pollutants above the established screening criteria triggered the need for monitoring of that specific pollutant in Part I.A. of the permit for that outfall. The screening criteria are then utilized in the permit as a comparative value. Based on the above, monitoring was established for the pollutants noted in the table below. In addition, annual toxicity screening was required for these same outfalls.

The SWPPP required by Part I.D.3. of the permit is designed to reduce pollutants in storm water runoff. Semi-annual monitoring for the pollutants noted in the table below and annual toxicity screening is recommended. Pollutant specific monitoring results above the established comparative value will not indicate unacceptable values; however, they will justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants to the maximum extent practicable. An annual report is to be submitted to the Regional Office and shall include the data collected the previous year with an indication if the SWPPP or any BMPs were modified based on the monitoring results.

Outfall 002 - (Storm water from areas including paper mill operations and the active landfill)

OUTFALL 002		COMPARATIVE VALUE	
PARAMETER	MONITORING DATA	SCREENING CRITERION (2X Acute criterion or restrictive WLA)	GENERAL PERMIT BENCHMARK VALUE
BOD5 (mg/l)	3.5	NA	30
Iron (mg/l)	6.3	NA	1.0
Ammonia (mg/l)	0.2	NA	NA
TKN (mg/l)	1.1	NA	NA
Nitrate-Nitrite (mg/l)	0.4	NA	NA
TSS (mg/l)	57.5	NA	100
Phosphorus (mg/l)	0.2	NA	NA

BOD5

The submitted data allows for a direct comparison to the benchmark value (30 mg/l). There is no numeric water quality criterion for BOD5; it would be limited based on the dissolved oxygen standard. All of the submitted data points were well below the benchmark value. However, based on that fact that this outfall contains storm water from an industrialized area, monitoring for BOD5 will remain for this outfall.

There are **no limits** for this parameter, only monitoring. This is a best professional judgment determination based on facility operations. DEQ's VPDES general permit for storm water associated with industrial activity [Sector B – Paper and Allied Products] includes monitoring for BOD5 with a cutoff concentration of 30 mg/l. In that regard, this pollutant and the value of 30 mg/l will be used for assessment of storm water BMPs. The SWPPP required by Part I.D.3. of the permit is designed to reduce pollutants in storm water runoff. Pollutant specific monitoring results above the established comparative value will not indicate unacceptable values; however, they will justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants to the maximum extent practicable.

The sample type is grab and the monitoring frequency is 1/6 months. This monitoring frequency and sample type should be adequate for assessment of potential storm water impacts and the effectiveness of the facility's SWPPP.

Iron

The submitted data allows for a direct comparison to the benchmark value (1.0 mg/l). The numeric water quality criterion for iron is only applicable to waters designated as public water supplies, which this is not. Most of the submitted data points (67%) were above the benchmark value (Iron is common to the

local geology/soils). Based on that fact that this outfall contains storm water from an industrialized area, monitoring for iron will remain for this outfall.

There are **no limits** for this parameter, only monitoring. This is a best professional judgment determination based on facility operations. DEQ's VPDES general permit for storm water associated with industrial activity [Sector L – Landfills, Land Application Sites and Open Dumps] includes monitoring for iron with a cutoff concentration of 1.0 mg/l. In that regard, this pollutant and the value of 1.0 mg/l will be used for assessment of storm water BMPs. The SWPPP required by Part I.D.3. of the permit is designed to reduce pollutants in storm water runoff. Pollutant specific monitoring results above the established comparative value will not indicate unacceptable values; however, they will justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants to the maximum extent practicable.

The sample type is grab and the monitoring frequency is 1/6 months. This monitoring frequency and sample type should be adequate for assessment of potential storm water impacts and the effectiveness of the facility's SWPPP.

TSS The submitted data allows for a direct comparison to the benchmark value (100 mg/l). There is no numeric water quality criterion for total suspended solids, only the narrative standard. Only two of the submitted data points (22%) were above the benchmark value. Based on that fact that this outfall contains storm water from an industrialized area, monitoring for TSS will remain for this outfall.

There are **no limits** for this parameter, only monitoring. This is a best professional judgment determination based on facility operations. DEQ's VPDES general permit for storm water associated with industrial activity [Sector L – Landfills, Land Application Sites and Open Dumps] includes monitoring for TSS with a cutoff concentration of 100 mg/l. In that regard, this pollutant and the value of 100 mg/l will be used for assessment of storm water BMPs. The SWPPP required by Part I.D.3. of the permit is designed to reduce pollutants in storm water runoff. Pollutant specific monitoring results above the established comparative value will not indicate unacceptable values; however, they will justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants to the maximum extent practicable.

The sample type is grab and the monitoring frequency is 1/6 months. This monitoring frequency and sample type should be adequate for assessment of potential storm water impacts and the effectiveness of the facility's SWPPP.

Outfalls 003 and 004 - (Storm water from areas including paper mill operations, a No. 6 fuel oil above ground storage tank, rail and truck raw and finished materials transfer areas, the paper machine #2 building, and the OCC building)

OUTFALL 003 and 004			COMPARATIVE VALUE
PARAMETER	MONITORING DATA	SCREENING CRITERION (2X Acute criterion or restrictive WLA)	GENERAL PERMIT BENCHMARK VALUE
BOD5 (mg/l) (Outfall 003)	<2	NA	30
BOD5 (mg/l) (Outfall 004)	<2	NA	30

BOD5 The submitted data allows for a direct comparison to the benchmark value (30 mg/l). There is no numeric water quality criterion for BOD5; it would be limited based on the dissolved oxygen standard. All of the submitted data points were well below the benchmark value for both outfalls. However, based on that fact that these outfalls contain storm water from industrialized areas, monitoring for BOD5 will remain for these outfalls.

There are **no limits** for this parameter, only monitoring. This is a best professional judgment determination based on facility operations. DEQ's VPDES general permit for storm water associated with industrial activity [Sector B – Paper and Allied Products] includes monitoring for BOD5 with a cutoff concentration of 30 mg/l. In that regard, this pollutant and the value of 30 mg/l will be used for assessment of storm water BMPs. The SWPPP required by Part I.D.3. of the permit is designed to reduce pollutants in storm water runoff. Pollutant specific monitoring results above the established comparative value will not indicate unacceptable values; however, they will justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants to the maximum extent practicable.

The sample type is grab and the monitoring frequency is 1/6 months. This monitoring frequency and sample type should be adequate for assessment of potential storm water impacts and the effectiveness of the facility's SWPPP.

Outfall 005 – (Storm water form areas including a closed bark landfill and a wood yard)

OUTFALL 005		COMPARATIVE VALUE	
PARAMETER	MONITORING DATA	SCREENING CRITERION (2X Acute criterion or restrictive WLA)	GENERAL PERMIT BENCHMARK VALUE
BOD5 (mg/l)	4	NA	30
Iron (mg/l)	1.1	NA	1.0
TKN (mg/l)	1	3600	120
Nitrate-Nitrite (mg/l)	3.3	NA	NA
COD (mg/l)	23	NA	NA
TSS (mg/l)	20	NA	100
Ammonia (mg/l)	< 0.1	NA	NA

BOD5

The submitted data allows for a direct comparison to the benchmark value (30 mg/l). There is no numeric water quality criterion for BOD5; it would be limited based on the dissolved oxygen standard. All of the submitted data points were well below the benchmark value. However, based on that fact that this outfall contains storm water from an industrialized area, monitoring for BOD5 will remain for this outfall.

There are **no limits** for this parameter, only monitoring. This is a best professional judgment determination based on facility operations. DEQ's VPDES general permit for storm water associated with industrial activity [Sector B – Paper and Allied Products] includes monitoring for BOD5 with a cutoff concentration of 30 mg/l. In that regard, this pollutant and the value of 30 mg/l will be used for assessment of storm water BMPs. The SWPPP required by Part I.D.3. of the permit is designed to reduce pollutants in storm water runoff. Pollutant specific monitoring results above the established comparative value will not indicate unacceptable values; however, they will justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants to the maximum extent practicable.

The sample type is grab and the monitoring frequency is 1/6 months. This monitoring frequency and sample type should be adequate for assessment of potential storm water impacts and the effectiveness of the facility's SWPPP.

Iron

The submitted data allows for a direct comparison to the benchmark value (1.0 mg/l). The numeric water quality criterion for iron is only applicable to waters designated as public water supplies, which this is not. Most of the submitted data points (78%) were above the benchmark value (Iron is common to the

local geology/soils). Based on that fact that this outfall contains storm water from an industrialized area, monitoring for iron will remain for this outfall.

There are **no limits** for this parameter, only monitoring. This is a best professional judgment determination based on facility operations. DEQ's VPDES general permit for storm water associated with industrial activity [Sector L – Landfills, Land Application Sites and Open Dumps] includes monitoring for iron with a cutoff concentration of 1.0 mg/l. In that regard, this pollutant and the value of 1.0 mg/l will be used for assessment of storm water BMPs. The SWPPP required by Part I.D.3. of the permit is designed to reduce pollutants in storm water runoff. Pollutant specific monitoring results above the established comparative value will not indicate unacceptable values; however, they will justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants to the maximum extent practicable.

The sample type is grab and the monitoring frequency is 1/6 months. This monitoring frequency and sample type should be adequate for assessment of potential storm water impacts and the effectiveness of the facility's SWPPP.

TSS The submitted data allows for a direct comparison to the benchmark value (100 mg/l). There is no numeric water quality criterion for total suspended solids, only the narrative standard. Only one of the submitted data points (11%) were above the benchmark value. Based on that fact that this outfall contains storm water from an industrialized area, monitoring for TSS will remain for this outfall.

There are **no limits** for this parameter, only monitoring. This is a best professional judgment determination based on facility operations. DEQ's VPDES general permit for storm water associated with industrial activity [Sector L – Landfills, Land Application Sites and Open Dumps] includes monitoring for TSS with a cutoff concentration of 100 mg/l. In that regard, this pollutant and the value of 100 mg/l will be used for assessment of storm water BMPs. The SWPPP required by Part I.D.3. of the permit is designed to reduce pollutants in storm water runoff. Pollutant specific monitoring results above the established comparative value will not indicate unacceptable values; however, they will justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants to the maximum extent practicable.

The sample type is grab and the monitoring frequency is 1/6 months. This monitoring frequency and sample type should be adequate for assessment of potential storm water impacts and the effectiveness of the facility's SWPPP.

Outfall 301

Total Petroleum

Hydrocarbons

The limit of 30 mg/l (monthly average) is based on best professional judgment as per Guidance Memorandum 97-2002 (Bulk Oil Storage Limits and Special Conditions) and are carried over from the previous permit. This internal outfall consists of collected storm water that is periodically discharged from the No. 6 fuel oil tank berm. [NOTE: Use of method 1664 for THP may result in actual concentrations being under reported. Therefore, method 1664 will not be accepted for compliance reporting purposes.]

THE GROUND WATER MONITORING RATIONALE IS BASED ON THE FOLLOWING:

Ground Water Monitoring Well Nos. MWB-02, MWB-05, MWB-07, MWL-02R, MWL-03R and MWL-04

Groundwater monitoring has been conducted since 1992 to determine if the wastewater treatment lagoons are adversely affecting groundwater. Six wells are currently being monitored: MWB-02, MWB-05, MWB-07, MWL-02R, MWL-03R and MWL-04. Wells MWB-02, MWB-05 and MWB-07 are identified as the upgradient monitoring wells, and Wells MWL-02R, MWL-03R and MWL-04 are downgradient of the lagoons. The parameters noted below are carried over from the previous permit.

Static Water

Level This is taken at the time of well sampling and helps to verify ground water flow direction. The monitoring frequency is measured once per year. This sample type and monitoring frequency are in accordance with guidance.

Specific

Conductance This is a monitoring requirement with no limits. This test is used to help insure that the well has been properly purged prior to sampling. The results can also provide an indication of dissolved solids which are mobile in the ground water and is a common indicator of the wastewater. The monitoring frequency is once per year by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and facility operations.

pH - This is a monitoring requirement with no limits. This test is used to help insure that the well has been properly purged prior to sampling. The monitoring frequency is once per year by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and facility operations.

TOC This is a monitoring requirement with no limits. This parameter is used, in part, to verify well integrity. The monitoring frequency is once per year by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and well integrity.

Ammonia This is a monitoring requirement with no limits. The monitoring frequency is once per year by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and facility operations.

Nitrate This is a monitoring requirement with no limits. This pollutant is mobile in the ground water and is a common indicator of the wastewater. The monitoring frequency is once per year by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and facility operations.

Total Phenols,

Total Cadmium and

Total Mercury This is a monitoring requirement with no limits. These parameters may be indicative of the wastewater. The monitoring frequency is once per year by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and facility operations.

Color This is a monitoring requirement with no limits. This parameter is indicative of the wastewater. The monitoring frequency is once per year by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and facility operations.

ATTACHMENT 8

SPECIAL CONDITIONS RATIONALE

**VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE**

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. Permit Reopeners

a. Chesapeake Bay Nutrients Reopener

Rationale: Significant portions of the Chesapeake Bay and its tributaries are listed as impaired on Virginia's 303(d) list of impaired waters for not meeting the aquatic life use support goal, and the 2004 Virginia Water Quality Assessment 305(b)/303(d) Integrated Report indicates that 83% of the mainstem Bay does not fully support this use support goal under Virginia's water quality assessment guidelines. Nutrient enrichment is cited as one of the primary causes for impairment.

b. Total Maximum Daily Load (TMDL)] Reopener

Rationale: Section 303(d) of the Clean Water Act requires that total maximum daily loads (TMDLs) be developed for streams listed as impaired in order that they achieve the applicable water quality standards. This condition allows for the permit to be either modified or, alternatively, revoked and reissued to bring it into compliance with any applicable TMDL approved for the receiving stream. The reopener recognizes that, according to section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan or other waste load allocation prepared under section 303 of the Act.

2. Operations & Maintenance (O & M) Manual

Rationale: The State Water Control Law, Section 62.1-44.16 requires the submittal of pertinent plans, specifications, maps and such other relevant information as may be required and Section 62.1-44.21 allows requests for any information necessary to determine the effect of the discharge on state waters. Required by the VPDES Permit Regulation, 9 VAC 25-31-190 E. Section 401 of the Clean Water Act requires the permittee to provide opportunity for the state to review the proposed operations of the facility. In addition, 40 CFR 122.41(e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) in order to achieve compliance with the permit (includes laboratory controls and QA/QC).

3. Licensed Wastewater Operator Requirement

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-200 D., requires the permittee to employ or contract at least one wastewater works operator who holds a current wastewater license for the permitted facility. The Code of Virginia 54.1-2300 et seq., Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.) requires licensure of operators. In addition, the Sewerage Collection and Treatment Regulations (12 VAC 5-581-10 et seq.), recommends a manning and classification schedule for domestic wastewater treatment plant operators, based on plant capacity and specific treatment types.

4. Notification Levels

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-200 A. and 40 CFR 122.42 (a) require notification of the discharge of certain parameters at or above specific concentrations for all manufacturing, commercial, mining and silvicultural discharges.

5. Effluent Monitoring Frequencies

Rationale: The permittee is granted a reduction in monitoring frequency based on a history of permit compliance. To remain eligible for the reduction, the permittee should not have violations that result in enforcement actions. If the permittee fails to maintain the previous level of performance, the baseline monitoring frequencies should be reinstated. The incentive for reduced monitoring is an effort to reduce the cost of environmental compliance and to provide incentives to facilities which demonstrate outstanding performance and consistent compliance with their permits. Facilities which cannot comply with specific effluent parameters or have other related violations will not be eligible for this benefit. This is in conformance with Guidance Memorandum No. 98-2005 - Reduced Monitoring and EPA's proposed "Interim Guidance For Performance-Based Reduction of NPDES Permit Monitoring Frequencies" (EPA 833-B-96-001) published in April 1996.

6. Ground Water Monitoring Plan

Rationale: The State Water Control Law, Section 62.1-44.21, authorizes the Board to request information needed to determine the discharge's impact on State waters. Ground water monitoring for parameters of concern will indicate whether the system integrity is being maintained and will determine if activities at the site are resulting in violations of the State Water Control Board's Ground Water Standards.

7. Sludge Management Plan

Rationale: Continues a requirement from the previous permit to maintain an approved SMP to ensure that waste solids are disposed of in a timely manner and in a way that will not cause degradation of water quality. This language continues a requirement found in Part I.B.7 of the previous permit.

8. Chlorophenolic Containing Biocides Prohibition

Rationale: Federal effluent guidelines (40 CFR Part 430) require limitations for pentachlorophenol and trichlorophenol for processes that use chlorophenolic-containing biocides. Greif indicated that chlorophenolic-containing biocides are not used in their paper manufacturing process. For this reason, the limitations on pentachlorophenol and trichlorophenol are not required. This special condition states that the permittee is not authorized to use these types of biocides. A permit modification request must be submitted to authorize the use of such biocides so that effluent limitations for the chlorophenolic compounds, as required by federal effluent guidelines, may be added to the permit.

9. Color Monitoring, Limitations and Reporting

Rationale: The permit contains effluent color limitations based on various flow regimes. This condition addresses monitoring for color and the associated river flow and how the data are to be reported on the DMR for compliance purposes.

10. Materials Handling/Storage

Rationale: 9VAC25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia §62.1-44.16 and §62.1-44.17 authorizes the Board to regulate the discharge of industrial waste or other waste.

11. PCB Monitoring Study

Rationale: This special condition shall require the permittee to monitor and report PCB concentrations in dry weather and wet weather effluent samples. The results from this monitoring shall be used to implement the PCB TMDL that is being developed for the Roanoke River. This facility is being given a PCB wasteload allocation in the TMDL

12 Oil Storage Ground Water Monitoring Reopener

Rationale: Facilities with greater than 1,000, 000 gallons of regulated aboveground petroleum storage are required to monitor ground water under the Facility and Aboveground Storage Tank Regulation 9VAC25-91. Where potential exists for ground water pollution and that regulation does not require monitoring, the VPDES permit may under Code of Virginia §62.1-44.21.

13. Facility Closure Plan

Rationale: Required by Code of Virginia § 62.1-44.18:3 and the Board's Financial Assurance Regulation, 9VAC25-650-10 et seq.

14. Permit Application Requirement

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-100 D. and 40 CFR 122.21 (d)(1) require a new application at least 180 days prior to expiration of the existing permit. In addition, the VPDES Permit Regulation, 9 VAC 25-31-100 E.1. and 40 CFR 122.21 (e)(1) note that a permit shall not be issued before receiving a complete application.

C TOXICS MANAGEMENT PROGRAM (TMP)

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-210 and 220 I., and 40 CFR 122.44(d) require monitoring in the permit to provide for and assure compliance with all applicable requirements of the Clean Water Act and the State Water Control Law. See additional justification included in this attachment.

D STORM WATER MANAGEMENT CONDITIONS

Rationale: Required by the VPDES Permit Regulation. Section 9 VAC 25-31-10 defines discharges of storm water from industrial activity and includes 11 industrial categories [9 of which are covered by the VPDES general permit for discharges of storm water associated with industrial activity (9 VAC 25-151-10 et seq.)] Included in the covered categories are municipal treatment plants with a design flow of 1.0 MGD or more, or plants with approved pretreatment programs, as discharges of storm water associated with industrial activity. Section 9 VAC 25-31-120 requires a permit for all these discharges associated with an industrial activity. The storm water pollution prevention plan requirements are derived from the VPDES general permit 9 VAC 25-151-10 et seq., which is based on the EPA storm water multi-sector general permit for industrial activities.

1. Storm Water Management Evaluation

Rationale: The Clean Water Act 402(p)(2)(B) requires permits for storm water discharges associated with industrial activity. VPDES permits for storm water discharges must establish BAT/BCT requirements in accordance with 402(p)(3) of the Act. The Storm Water Pollution Prevention Plan is the vehicle proposed by EPA in the NPDES Baseline Industrial Storm Water General Permit (published in the Federal Register September 9, 1992) to meet the requirements of the Act. Additionally, the VPDES Permit Regulation, 9 VAC 25-31-220 K., and 40 CFR 122.44 (k) allow BMPs for the control of pollutants where numeric limits are infeasible or BMPs are needed to accomplish the purpose/intent of the law.

On August 1, 1996, EPA published a document entitled "Interim Permitting Approach for Water Quality-Effluent Limitations in Storm Water Permits". This document indicated that an interim approach to limiting storm water could be through the use of best management practices rather than numerical limits. EPA pointed out that section 502 of the Clean Water Act (CWA) defined "effluent limitation" to mean "any restriction on quantities, rates, and concentrations of constituents discharged from point sources. The CWA does not say that effluent limitations need be numeric." The use of BMPs falls in line with the Clean Water Act which notes the need to control these discharges to the maximum extent necessary to mitigate impacts on water quality.

2. General Storm Water Conditions

a. Sample Type

Rationale: This stipulates the proper sampling methodology for qualifying rain events from regulated storm water outfalls. Use of this condition is a BPJ determination and is based on the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq.

b. Storm Event Data

Rationale: This sets forth the information which must be recorded and reported for each storm event sampling (ie. date and duration event, rainfall measurement, and duration between qualifying events). It requires the maintenance of daily rainfall logs which are to be reported. It also provides guidance for when there is no effluent to sample during a given period. Use of this condition is a BPJ determination and is based on the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq.

c. Monitoring Waivers

Rationale: This condition allows the permittee to collect substitute samples of qualifying storm events in the event of adverse climatic conditions. Use of this condition is a BPJ determination and is based on the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq.

d. Representative Outfalls

Rationale: This condition allows the permittee to submit the results of sampling from one outfall as representative of other similar outfalls, provided the permittee can demonstrate that the outfalls are substantially identical. Use of this condition is a BPJ determination and is based on the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq.

e. Quarterly Visual Monitoring of Storm Water Quality

Rationale: This condition requires that visual examinations of storm water outfalls take place at a specified frequency and sets forth what information needs to be checked and documented. These examinations assist with the evaluation of the pollution prevention plan by providing a simple, low cost means of assessing the quality of storm water discharge with immediate feedback. Use of this condition is a BPJ determination and is based on the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq.

f. Allowable Non-storm Water Discharges

Rationale: This condition requires that the storm water pollution prevention plan identify specified non-storm water discharges and ensure the implementation of appropriate pollution prevention measures for each of the non-storm water components of the discharge. Where these classes of non-storm water discharges are identified in the plan and where appropriate pollution prevention measures are evaluated, identified and implemented, they generally pose low risks to the environment. Also, identification of these discharges in the plan negates the need to cover them under a separate VPDES permit. Flows from fire fighting activities do not need to be identified in the plan due to the emergency nature of such discharges coupled with their low probability and the unpredictability of their occurrence. Use of this condition is a BPJ determination and is based on the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq.

g. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

Rationale: This condition requires that the discharge of hazardous substances or oil from a facility be eliminated or minimized in accordance with the facility's storm water pollution prevention plan. If there is a discharge of a material in excess of a reportable quantity, it establishes the reporting requirements in accordance with state laws and federal regulations. In addition, the pollution prevention plan for the facility must be reviewed and revised as necessary to prevent a reoccurrence of the spill. Use of this condition is a BPJ determination and is based on the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq.

h. Additional Requirements for Salt Storage

Rationale: This condition requires that storage piles of salt be covered except during those times when salt is either being added or removed. This is to prevent exposure to precipitation that could result in a brine discharge to surface waters which would be detrimental to the aquatic environment. If the runoff is collected and not discharged to surface waters, the facility is exempt from this requirement. Use of this condition is a BPJ determination and is based on the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq.

i. Water Quality Protection

Rationale: This condition requires the permittee to select, install, implement and maintain BMPs in order to minimize pollutants in the storm water discharges to a point where applicable water quality standards are met. If there is evidence in that the discharge is creating water quality problems, DEQ may require the implementation of additional BMPs to correct the problem or take appropriate enforcement action. Use of this condition is a BPJ determination and is based on the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq.

3. Storm Water Pollution Prevention Plan

Rationale: The Clean Water Act 402(p)(2)(B) requires permits for storm water discharges associated with industrial activity. VPDES permits for storm water discharges must establish BAT/BCT requirements in accordance with 402(p)(3) of the Act. The Storm Water Pollution Prevention Plan is the vehicle proposed by EPA in the NPDES Baseline Industrial Storm Water General Permit (published in the Federal Register September 9, 1992) to meet the requirements of the Act. Additionally, the VPDES Permit Regulation, 9 VAC 25-31-220 K., and 40 CFR 122.44 (k) allow BMPs for the control of pollutants where numeric limits are infeasible or BMPs are needed to accomplish the purpose/intent of the law.

Part II CONDITIONS APPLICABLE TO ALL VPDES PERMITS

The VPDES Permit Regulation, 9 VAC 25-31-190, and 40 CFR 122, require all VPDES permits to contain or specifically cite the conditions listed.

ATTACHMENT 9

MATERIAL STORED

ATTACHMENT 10

RECEIVING WATERS INFO./
TIER DETERMINATION/STORET DATA

ATTACHMENT 11

303(d) LISTED SEGMENTS

ATTACHMENT 12

TABLE A AND TABLE B - CHANGE SHEETS

TABLE A
VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER	MONITORING CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

TABLE B

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the changes).

NOTE: INCLUDE ONLY CHANGES MADE DUE TO OUTSIDE COMMENTS (OWNER, EPA, PUBLIC, ETC.). LEAVE THIS TABLE OUT IF THERE ARE NO SUCH CHANGES.

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001					

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 13

NPDES INDUSTRIAL PERMIT RATING WORKSHEET

NPDES Permit Rating Work Sheet

NPDES NO: V A 0 0 0 6 4 0 8

Facility Name:

G R E E F P A C K A G I N G L L C

City: R I V E R V I L L E V A

Receiving Water: J A M E S R I V E R

Reach Number:

☐ Regular Addition
☐ Discretionary Addition
☒ Score change, but no status change
☐ Deletion

Is this facility a steam electric power plant (SIC=4911) with one or more of the following characteristics?

1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rate

☐ YES: score is 600 (stop here) ☒ NO (continue)

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

☐ YES; score is 700 (stop here)
☒ NO (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: 2 6 3 1 Primary SIC Code: 2 6 3 1

Other SIC Codes:

Industrial Subcategory Code: 0 2 1 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	15	<input type="checkbox"/> 7.	7	35
<input type="checkbox"/> 1.	1	5	<input type="checkbox"/> 4.	4	20	<input type="checkbox"/> 8.	8	40
<input type="checkbox"/> 2.	2	10	<input type="checkbox"/> 5.	5	25	<input type="checkbox"/> 9.	9	45
			<input checked="" type="checkbox"/> 6.	6	30	<input type="checkbox"/> 10.	10	50

Code Number Checked: 0 6

Total Points Factor 1: 3 0

FACTOR 2: Flow/Stream Flow Volume (Complete Either Section A or Section B; check only one)

Section A--Wastewater Flow Only Considered

Section B--Wastewater and Stream Flow Considered

Wastewater Type (See Instructions)			CodePoints		Wastewater Type (See Instructions)		Percent of Instream Wastewater Concentration at Receiving Stream Low Flow		CodePoints	
Type I:	Flow < 5 MGD	___	11	0	Type I/III:	< 10%	___	41	0	
	Flow 5 to 10 MGD	___	12	10			> 10% to < 50%	___	42	10
	Flow > 10 to 50 MGD	___	13	20			> 50%	___	43	20
	Flow > 50 MGD	___	14	30						
Type II:	Flow < 1 MGD	___	21	10	Type II:	<10%	___	51	0	
	Flow 1 to 5 MGD	___	22	20			> 10% to < 50%	___	52	20
	Flow > 5 to 10 MGD	<u>✓</u>	23	30			> 50%	___	53	30
	Flow > 10 MGD	___	24	50						
Type III:	Flow < 1 MGD	___	31	0						
	Flow 1 to 5 MGD	___	32	10						
	Flow > 5 to 10 MGD	___	33	20						
	Flow > 10 MGD	___	34	30						

Code Checked from Section A or B: 2 3

Total Points Factor 2: 3 0

NPDES Permit Rating Work Sheet

NPDES No.: V A 0 0 0 6 4 0 8

FACTOR 3: Conventional Pollutants

(only when limited by the permit)

A. Oxygen Demanding Pollutant: (check one) ☒ BOD ☐ COD ☐ Other: _____

Permit Limits: (check one)		Code Points	
<input type="checkbox"/>	< 100 lbs/day	1	0
<input type="checkbox"/>	100 to 1000 lbs/day	2	5
<input type="checkbox"/>	>1000 to 3000 lbs/day	3	15
<input checked="" type="checkbox"/>	>3000 lbs/day	4	20

Code Checked: 4

Points Scored: 2 0

B. Total Suspended Solids (TSS)

Permit Limits: (check one)		Code Points	
<input type="checkbox"/>	< 100 lbs/day	1	0
<input type="checkbox"/>	100 to 1000 lbs/day	2	5
<input checked="" type="checkbox"/>	>1000 to 5000 lbs/day	3	15
<input type="checkbox"/>	>5000 lbs/day	4	20

Code Checked: 3

Points Scored: 1 5

C. Nitrogen Pollutant: (check one) ☐ Ammonia ☐ Other: n/a

Permit Limits: (check one)		Code Points	
<input type="checkbox"/>	< 300 lbs/day	1	0
<input type="checkbox"/>	300 to 1000 lbs/day	2	5
<input type="checkbox"/>	>1000 to 3000 lbs/day	3	15
<input type="checkbox"/>	>3000 lbs/day	4	20

Code Checked:

Points Scored: 0 0

Total Points Factor 3: 3 5

FACTOR 4: Public Health Impact

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this includes any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above referenced supply.

☐ YES (if yes, check toxicity potential number below)

☒ NO (if no, go to Factor 5)

Determine the human health toxicity potential from Appendix A. Use the same SIC code and subcategory reference as in Factor 1. (Be sure to use the human health toxicity group column -- check one below)

Toxicity Group CodePoints				Toxicity Group CodePoints				Toxicity Group CodePoints			
___	No process waste streams	0	0	___	3.	3	0	___	7.	7	15
				___	4.	4	0	___	8.	8	20
___	1.	1	0	___	5.	5	5	___	9.	9	25
	2.	2	0	___	6.	6	10	___	10.	10	30

Code Number Checked:

Total Points Factor 4: 0 0

NPDES Permit Rating Work Sheet

NPDES No.: V A 0 0 0 6 4 0 8

FACTOR 5: Water Quality Factors

- A. Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-based federal effluent guidelines, or technology-based state effluent guidelines), or has a wasteload allocation been assigned to the discharge?

CodePoints			
<u>x</u>	Yes	1	10
<u> </u>	No	2	0

- B. Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

CodePoints			
<u>x</u>	Yes	1	0
<u> </u>	No	2	5

- C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

CodePoints			
<u> </u>	Yes	1	10
<u>x</u>	No	2	0

Code Number Checked: A 1 B 1 C 2

Points Factor 5: A 110 + B 0 + C 000 = 110 TOTAL

FACTOR 6: Proximity to Near Coastal Waters

- A. Base Score: Enter flow code here (from Factor 2): 213 Enter the multiplication factor that corresponds to the flow code: 0.60

Check appropriate facility HPRI Code (from PCS):

HPRI #	Code	HPRI Score	Flow Code	Multiplication Factor
<u> </u> 1	1	20	11, 31, or 41	0.00
<u> </u> 2	2	0	12, 32, or 42	0.05
<u> </u> 3	3	30	13, 33, or 43	0.10
<u> </u> 4	4	0	14 or 34	0.15
<u> </u> 5	5	20	21 or 51	0.10
<u> </u> 6	6	0	22 or 52	0.30
<u> </u> 7	7	0	23 or 53	0.60
<u> </u> 8	8	0	24	1.00

HPRI code checked: 4

Base Score: (HPRI Score) 0 x (Multiplication Factor) 0.60 = 0 (TOTAL POINTS)

- B. Additional Points—NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

CodePoints			
<u> </u>	Yes	1	10
<u> </u>	No	2	0

- C. Additional Points—Great Lakes Area of Concern

for a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 areas of concern (see instructions)

CodePoints			
<u> </u>	Yes	1	10
<u> </u>	No	2	0

Code Number Checked: A 4 B C

Points Factor 6: A 000 + B 000 + C 000 = 0 TOTAL

NPDES Permit Rating Work Sheet

NPDES No.: V A 0 0 0 6 4 0 8

SCORE SUMMARY

Factor	Description	Total Points
1	Toxic Pollutant Potential	<u>30</u>
2	Flow/Stream flow Volume	<u>30</u>
3	Conventional Pollutants	<u>35</u>
4	Public Health Impacts	<u>0</u>
5	Water Quality Factors	<u>10</u>
6	Proximity to Near Coastal Waters	<u>0</u>
TOTAL (Factors 1-6)		<u>105</u>

S1. Is the total score equal to or greater than 80? ☒ Yes (Facility is a major) ☐ No

S2. If the answer to the above question is no, would you like this facility to be discretionary major?

☐ No

☐ Yes (add 500 points to the above score and provide reason below:

Reason:

NEW SCORE: 105

OLD SCORE: 110

Frank Bowman

Permit Reviewer's Name

(434) 582 - 6207

Phone Number

5/3/12

Date

ATTACHMENT 14

EPA/VIRGINIA DRAFT PERMIT SUBMISSION CHECKLIST

Part I. Virginia Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name:	Greif Packaging LLC
NPDES Permit Number:	VA0006408
Permit Writer Name:	Frank Bowman
Date:	5/3/12

Major ☒ Minor ☐ Industrial ☒ Municipal ☐

I.A. Draft Permit Package Submittal Includes:	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?	X		
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?	X		
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?			X
8. Whole Effluent Toxicity Test summary and analysis?	X		
9. Permit Rating Sheet for new or modified industrial facilities?	X		

I.B. Permit/Facility Characteristics	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X		
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	

I.B. Permit/Facility Characteristics – cont.	Yes	No	N/A
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants? (TSS)	X		
7. Does the fact sheet or permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?	X		
8.a. Has a TMDL been developed and approved by EPA for the impaired water?		X	
8.b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?		X	
8.c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?		X	
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?	X		
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?	X		
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria? (Color)	X		
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Does the permit include appropriate Pretreatment Program requirements?			X
18. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
19. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
20. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
21. Has previous permit, application, and fact sheet been examined?	X		

Part II NPDES Draft Permit Checklist
Region III NPDES Permit Quality Review Checklist – For Non-Municipals
 (To be completed and included in the record for all non-POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?	X		
1.a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?	X		
1.b. If no, does the record indicate that a technology-based analysis based on best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?			X
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?	X		
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?	X		
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a “reasonable measure of ACTUAL production: for the facility (not design)?	X		
5. Does the permit contain “tiered” limits that reflect projected increases in production or flow?		X	
5.a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			X
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?	X		
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average and/or monthly average limits?	X		
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?		X	

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?		X	
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?	X		
4.a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?	X		
4.b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		
4.c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?	X		
4.d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (e.g., do calculations include ambient/background concentrations where data are available)?	X		
4.e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass concentration)?	X		
8. Does the fact sheet indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?	X		
1.a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate his waiver?			X
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State's standard practices?	X		

II.F. Special Conditions	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?	X		
1.a. If yes, does the permit adequately incorporate and require compliance with the BMPs?	X		
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?	X		

II.G. Standard Conditions	Yes	No	N/A
1. Does the permit contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		
List of Standard Conditions – 40 CFR 122.41 <ul style="list-style-type: none"> • Duty to comply • Duty to reapply • Need to halt or reduce activity not a defense • Duty to mitigate • Proper O & M • Permit Actions • Property rights • Duty to provide information • Inspections and entry • Monitoring and reporting • Signatory requirement • Reporting requirements <ul style="list-style-type: none"> Planned change Anticipated non-compliance Transfers Monitoring Reports Compliance schedules 24-hour reporting Other non-compliance • Bypass • Upset 			
2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	Frank Bowman
Title	Environmental Specialist
Signature	
Date	5/3/12

ATTACHMENT 15

CHRONOLOGY SHEET

CHRONOLOGY OF EVENTS

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED
12/8/11				
APPLICATION TO VDH: 3/15/12			VDH COMMENTS RECEIVED: 3/21/12	
APPLICATION ADMIN. COMPLETE: 12/8/11			APPLICATION TECH. COMPLETE: 12/8/11	

Date DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos, hearings, etc. affecting permit from application to issuance)

8/2/11	Reissuance reminder letter mailed to owner
12/8/11	Received one original and three copies of permit application
12/30/11	Application administratively complete letter sent
3/15/12	Application sent to VDH
3/21/12	Received memo from VDH
5/3/12	Draft permit/FS to Bob Tate for review
5/15/12	Draft permit/FS from Bob Tate, revisions made
5/21/12	PN transmitted to newspaper for publication
5/22/12	Draft permit/FS to EPA
5/22/12	Draft permit/FS to owner
//12	PN verification received from newspaper
//12	Received no objections letter from EPA

Date DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos, hearings, etc. affecting permit from application to issuance)

--	--